

SONY

KVX2520


MODEL

SERVICE MANUAL

TABLE OF CONTENTS

| <u>Section</u> | <u>Title</u> | <u>Page</u> | <u>Section</u> | <u>Title</u> | <u>Page</u> |
|-------------------------------|---|-------------|---------------------------------|-------------------------------|-------------|
| 1. GENERAL | | | 5. DIAGRAMS | | |
| 1-1. | First of All | 3 | 5-1. | Block Diagram | 19 |
| 1-2. | Connecting Other Equipment | 3 | 5-2. | Circuit Boards Location | 24 |
| 1-3. | Function of Controls | 5 | 5-3. | Schematic Diagrams | 24 |
| 1-4. | Viewing Teletext | 7 | 5-4. | Printed Wiring Boards | 30 |
| | | | 5-5. | Semiconductors | 46 |
| 2. DISASSEMBLY | | | 6. EXPLODED VIEWS | | |
| 2-1. | Rear Cover Removal | 8 | 6-1. | Rear Cover | 47 |
| 2-2. | Chassis Assy Removal | 8 | 6-2. | Picture Tube | 48 |
| 2-3. | J ₁ , A and V Boards Removal | 8 | | | |
| 2-4. | KS and B Boards Removal | 9 | 7. ELECTRICAL PARTS LIST | | 49 |
| 2-5. | Service Position | 9 | | | |
| 2-6. | Picture Tube Removal | 9 | | | |
| 3. SET-UP ADJUSTMENTS | | | | | |
| 3-1. | Beam Landing | 10 | | | |
| 3-2. | Convergence | 11 | | | |
| 3-3. | Focus | 13 | | | |
| 3-4. | White Balance | 14 | | | |
| 4. CIRCUIT ADJUSTMENTS | | | | | |
| 4-1. | B Board Adjustments | 15 | | | |
| 4-2. | D Board Adjustments | 16 | | | |
| 4-3. | A Board Adjustments | 16 | | | |
| 4-4. | J ₁ Board Adjustments | 17 | | | |
| 4-5. | V Board Adjustments | 17 | | | |
| 4-6. | Sub Adjustments | 17 | | | |

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK
 ON THE SCHEMATIC DIAGRAMS, EXPLODED
 VIEWS AND IN THE PARTS LIST ARE CRITICAL TO
 SAFE OPERATION. REPLACE THESE COMPONENTS
 WITH SONY PARTS WHOSE PART NUMBERS APPEAR
 AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS
 PUBLISHED BY SONY.

SECTION 1

GENERAL

Note) The layout, etc., will be slightly different from the operating instructions packed with the units.

1-1. FIRST OF ALL

- 1 Connect the aerial to the Γ socket on the rear of the set.
This socket receives the standard 75-ohm aerial plug.
- 2 Plug in the set.
- 3 Tune in the available channels.

Use the buttons inside the panel. To open the panel, push the center.

To tune in all channels automatically :

- 1 Press \rightarrow (preset).
- 2 Press PROGR to select the program position from which tuning is to start.
- 3 Press \rightarrow (auto programing).

The channels will be tuned in and memorized in consecutive positions, beginning from the program position selected in step 2.

When tuning has been completed, the set returns to the position where tuning began.

To tune in a channel in any desired program position.

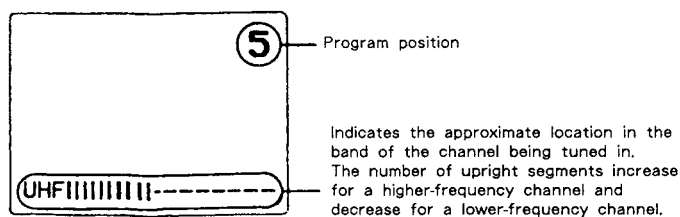
- (e. g. the position which the same number as the channel) :
- 1 Press \rightarrow (preset).
 - 2 Press PROGR to select the desired program position.
 - 3 Press C (clear).
 - 4 Press \rightarrow (search) repeatedly until the desired channel appears.
 - 5 Repeat steps 2 to 4 for all channels, if required.
 - 6 Press \rightarrow (preset) again.

If the set is to be used in an area with poor reception, preset the program numbers between 1 and 19 for TV program use.

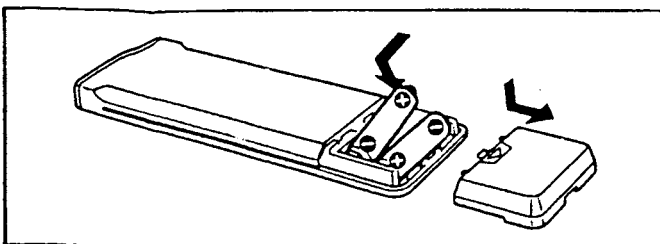
To have the unused program positions skipped when PROGR+ or PROGR- is pressed

- 1 Press \rightarrow (preset).
- 2 Press PROGR to select the unused position.
- 3 Press C (clear).
- 4 Repeat steps 2 and 3 for all unused position.
- 5 Press \rightarrow (preset) again.

On-screen display while tuning

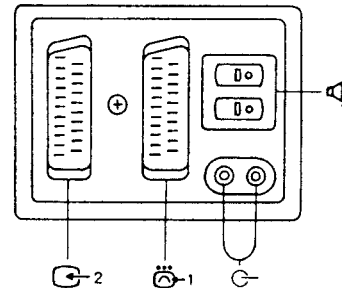


- 4 Insert two R6 batteries checking the correct polarity.



1-2. CONNECTING OTHER EQUIPMENT

Connectors on rear set



| | | |
|-----------------|---|--|
| L/G/S | Left external speaker terminal (2-pin DIN) | Connect to external speakers. The TV speakers will be disconnected. speakers 8-16 Ω |
| R/D/D | Right external speaker terminal (2-pin DIN) | |
| R/D/D | Right audio output jack (phono jack) | Connect to audio equipment. When only using the phono-jacks, two loudspeaker plugs, (DIN 41529) should be inserted into the external speaker terminals so that the TV speaker output is switched off. |
| L/G/S | Left audio output jack (phono jack) | |
| \rightarrow 1 | 21-pin connector (CENELEC standard) | Connect to a VTR micro computer, etc. The picture of the TV channel being received is always output. The picture of \rightarrow 2 can be watched while recording a TV program with the VTR connected to \rightarrow 1. |
| \rightarrow 2 | 21-pin connector (without RGB input) | Connect to second VTR. The picture displayed on the screen is always output. The picture of \rightarrow 1 can be recorded with the VTR connected to \rightarrow 2 while monitoring the picture. |

VTR operation using the supplied Commander

Remote operation of the VTR is limited to the features and functions of the VTR. For further details, refer to the VTR manual.

When watching a video with the VTR connected to the Γ connector, set the channel for the video to the program number 0 or any empty channel between 20 and 29.

Note

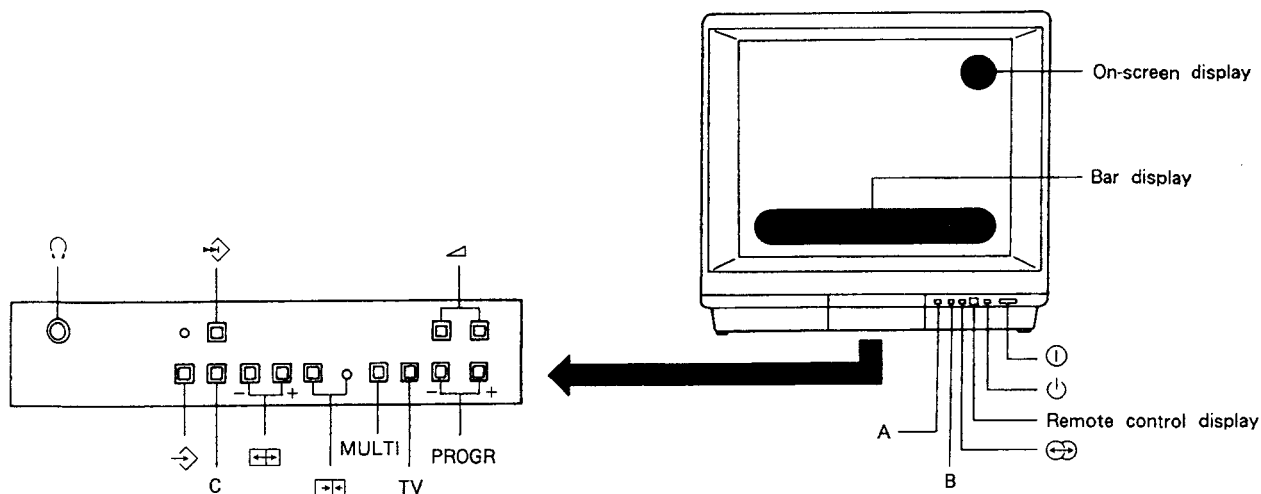
Move the VTR away from the TV, if the picture or sound is distorted.

21 pin connector (1, 2)

| Pin No. | 1 | 2 | Signal | Signal level |
|---------|---|---|------------------------------|---|
| 1 | ○ | ○ | Audio output B (right) | Standard level : 0.5 Vrms Output impedance : Less than 1 k ohm* |
| 2 | ○ | ○ | Audio input B (right) | Standard level : 0.5 Vrms Input impedance : More than 10 k ohms* |
| 3 | ○ | ○ | Audio output A (left) | Standard level : 0.5 Vrms Output impedance : Less than 1 k ohm* |
| 4 | ○ | ○ | Ground (audio) | |
| 5 | ○ | ○ | Ground (blue) | |
| 6 | ○ | ○ | Audio input A (left) | Standard level : 0.5 Vrms Input impedance : More than 10 k ohms* |
| 7 | ○ | ● | Blue input | 0.7 V \pm 2 dB, 75 ohms, positive |
| 8 | ○ | ○ | Function select (AV control) | High state (9.5–12 V) : Part mode Low state (0–2 V) : TV mode Input impedance : More than 10 k ohms Input capacitance : Less than 2 nF |
| 9 | ○ | ○ | Ground (green) | |
| 10 | ○ | ○ | Open | |
| 11 | ○ | ● | Green/Green with sync input | Green signal : 0.7 V \pm 2 dB, 75 ohms, positive Green with sync signal : 1 V \pm 2 dB, 75 ohms, positive |
| 12 | ○ | ○ | Open | |
| 13 | ○ | ○ | Ground (red) | |
| 14 | ○ | ○ | Ground (blanking) | |
| 15 | ○ | ● | Red input | (Same as Pin 7) |
| 16 | ○ | ● | Blanking input (Ys signal) | High state (1–3 V) Low state (0–0.4 V) Input impedance : 75 ohms |
| 17 | ○ | ○ | Ground (video output) | |
| 18 | ○ | ○ | Ground (video input) | |
| 19 | ○ | ○ | Video output | 1 V \pm 2 dB, 75 ohms, positive Sync : 0.3 V (–3, \pm 10 dB) |
| 20 | ○ | ○ | Video input | 1 V \pm 2 dB, 75 ohms, positive Sync : 0.3 V (–3, \pm 10 dB) |
| 21 | ○ | ○ | Common ground (plug, shield) | |

* at 20 Hz–20 kHz ○ connected ● unconnected (open)

1-3. FUNCTION OF CONTROLS



On the set

On-screen display

Indicates program numbers and input modes.

Bar display

Indicates the level of volume, color, brightness, contrast, bass, treble and balance.

Note on function.

When the volume is at the minimum setting the balance function will not operate.

Power switch

To cut off the mains power completely, press this switch. Depress the power switch fully to ensure correct operation of the set.

Note

To ensure correct operation, push the switch in fully.

standby indicator

Lights up brightly when the set is in the standby mode.

Note

If the main power is turned off when in standby mode, the standby indicator will take 2 to 6 seconds to go off.

space sound indicator

Lights up when on the Remote Commander is pressed.

A/B indicators

One of them lights during bilingual broadcast. (Choose A or B with the Remote Commander.)

Both light during stereo broadcast. In AV mode, A lights for left channel, B for right channel, or A and B for both channels.

Remote control detector

Point the Remote Commander towards this detector.

Inside the panel

headphones jack (stereo minijack)

SEARCH buttons

Press to fine tune a weak channel manually, if required. When is pressed, the indicator (AFT) goes off and the AFT circuit does not function on the selected channel. To restore the AFT circuit on this channel, press (AFT) so that the indicator lights up.

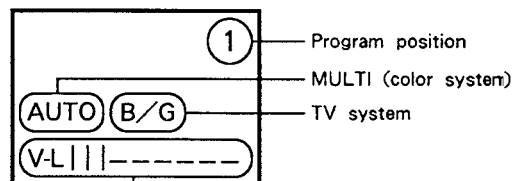
AFT button and indicator

Normally, press so that the indicator lights up. The AFT circuit automatically fine tunes the channel for the best possible picture.

volume buttons

PROGR+, PROGR- program scan buttons

On-screen display during presetting



Indicates the approximate location in the band of the channel being tuned in.

"V-L": low VHF band, "V-H": high VHF band, "UHF": UHF band.

The number of upright segments increases for a higher-frequency channel.

Each time TV button is pressed, the following indications appear in this order.

B/G: West European TV standard

I: British TV standard

M: American TV standard

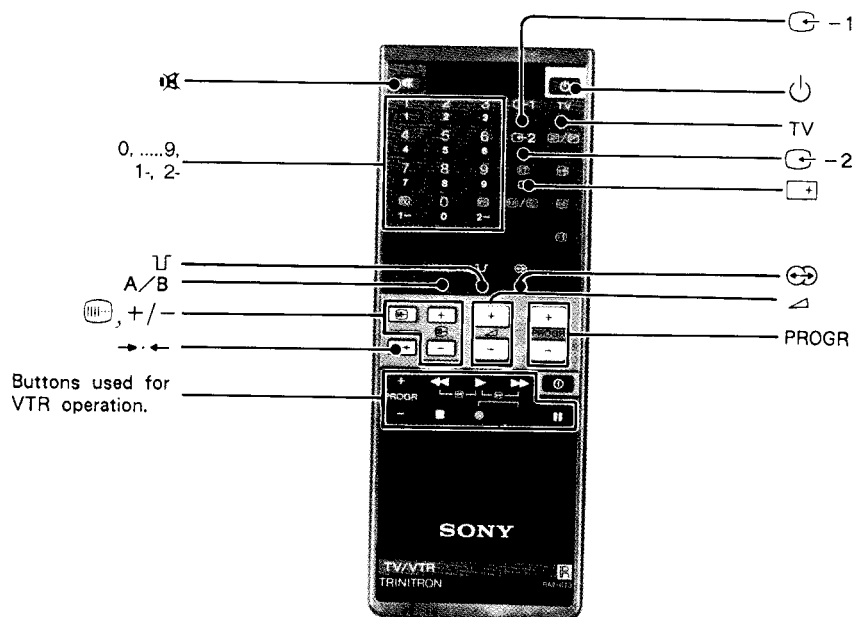
D/K: East European TV standard

L: French TV standard

Each time MULTI button (COLOR SYSTEM) is pressed, the following indications appear in this order.

AUTO; NTSC_{3.58};

Normally set to the AUTO position. The available color system is selected automatically.



RM-673

On the Remote Commander

To operate the Commander, point it toward the remote control detector.

mute button


0, ..., 9, 1-, 2- buttons








To tune into:
program 15, press 1- and 5.
program 25, press 2- and 5.

A/B button

Press to select the language in a bilingual broadcast, or to select the channel in AV mode.

, + / - analogue select buttons

Press .

 will appear on the screen. Adjust by pressing + or -. Press  again and adjust  (color), then  (brightness),  (bass),  (treble) and  (balance).

reset button

Press to reset color, contrast and brightness to factory-set levels.

standby button

Press to change to the standby mode. Use this button to turn off the set for short periods of time.


To turn on the set, press TV or the program number; there will be a slight delay before the picture is restored.

If the main power is turned off when in standby mode, the standby indicator will take 2 to 6 seconds to go off.

TV button

Press to change to the TV mode from standby,  input or teletext modes.


1 input button


Press to view the input picture coming in through the  connector.

" 1" lights up on the screen.

Press TV or the program number to return to the TV mode.

2 input button

Press to view the input picture coming in through the  connector.

" 2" lights up on the screen.

Press TV or the program number to return to the TV mode.

on-screen display button

Press to make the display appear on the screen.

Press again to make it disappear.

loudness button

Press to emphasize high and low notes.

space sound button

Press to obtain special acoustic effects.

volume buttons

PROGR program scan buttons

Note

Buttons not referred to on this page or next page do not operate.

1-4. VIEWING TELETEXT

To view the teletext service, use the Remote Commander. The buttons for teletext operation are indicated in green.

Operation

- 1 Select the TV channel for the desired teletext service.
- 2 Press (TEXT/MIX) to display the teletext service.
Once has been pressed, the TV channel cannot be changed.
- 3 Key in the three digits for the desired page using the number buttons. If an error is made, complete the three-digit sequence by keying in any digit. Then re-enter the correct page number. The requested teletext page is displayed.

To return to the TV mode, press TV on the remote commander.

The teletext service can be displayed directly from the standby mode, by pressing .

To receive the teletext service of a different TV channel

- 1 Press TV to return to the TV mode.
- 2 Select the desired TV channel.
- 3 Press .

Note

To receive the teletext service accurately, keep inside the panel switched on during teletext operation.

To display the index page

Press (INDEX).

If the necessary signal is not being broadcast, page 100 is displayed.

To access the next or preceding page

Press (PAGE+) or (PAGE-).

To superimpose the teletext display on the TV picture

Press twice from TV mode.

Press again to return to the TEXT display.

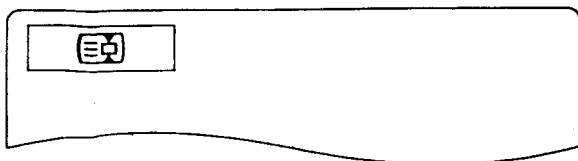
To suppress the teletext display so that the TV picture is displayed

Press (TEXT CL).

This button can be operated from both the TEXT and MIX displays.

To prevent a teletext page (subpage) from being updated / changed

Press (HOLD). The HOLD symbol appears at the top of the screen.



To resume normal teletext reception, press .

To enlarge the teletext display

Press .

Press once to enlarge the upper half of the display; press again to enlarge the lower half of the display; press again to return to the normal display.

To reveal concealed information such as the answers to a quiz

Press (REVEAL).

Press again to conceal the answers.

To adjust the contrast of the teletext display.

When in teletext mode, adjust by using the + or - keys adjacent to the key.

To watch the TV program while waiting for a requested page to be displayed

- 1 Request the new page.
- 2 Press to watch the TV program.
The requested page number appears at the top left of the screen.
When the requested page has been captured, the page number is displayed in the top left hand corner of the screen.



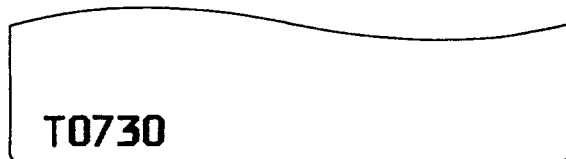
To view this page, press .

To have a requested page displayed at a pre-determined time

- 1 Request a time coded page (e. g. alarm page).
- 2 Press (TP ON).
"T****" will appear at the bottom of the screen.



- 3 Enter your request time with the number buttons, using four digits. For example, 07 : 30.



To watch the TV program until the requested time, press . At the requested time, the page number will be displayed at the bottom of the screen.

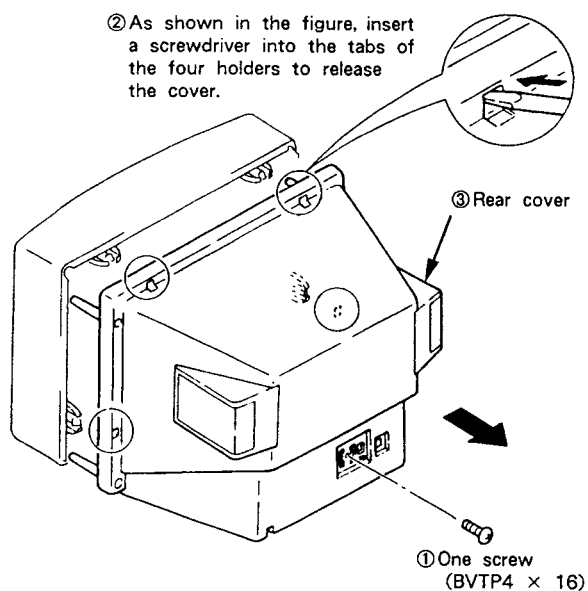
To view this page, press .

To cancel the request, first ensure that the teletext page is displayed, then press (TP OFF).

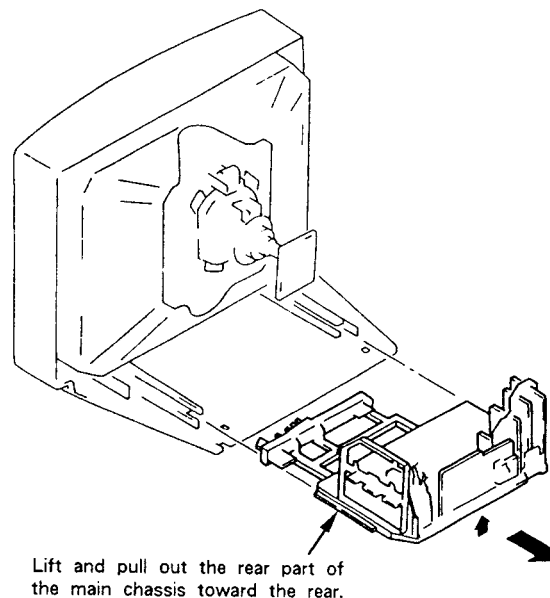
SECTION 2

DISASSEMBLY

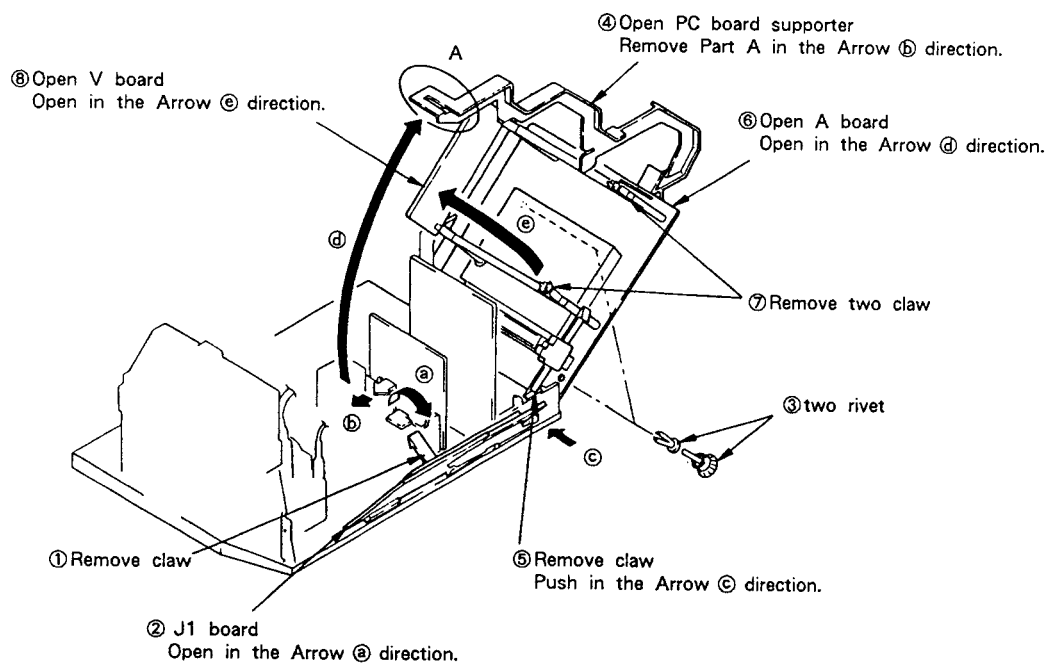
2-1. REAR COVER REMOVAL



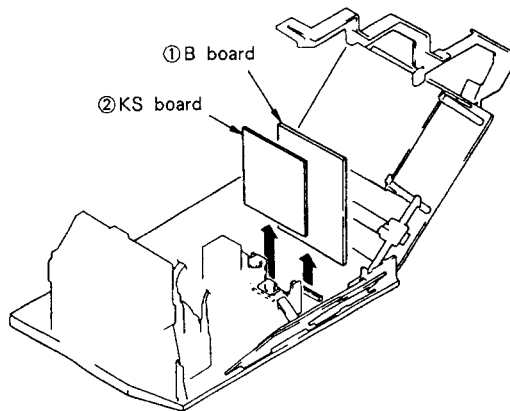
2-2. CHASSIS ASSY REMOVAL



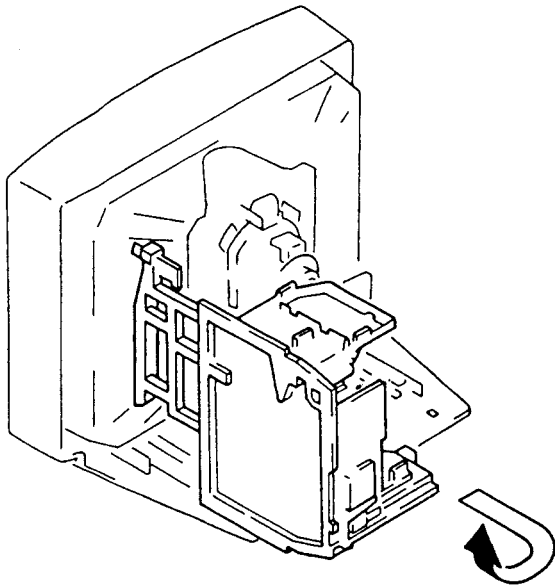
2-3. J1, A AND V BOARDS REMOVAL



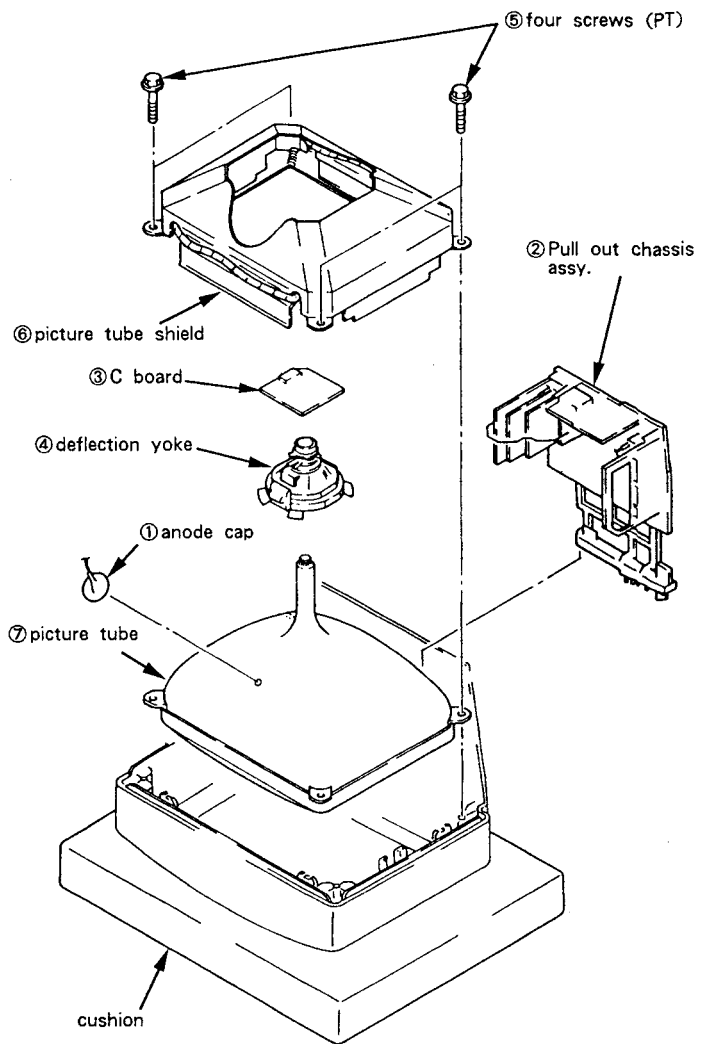
2-4. KS AND B BOARDS REMOVAL



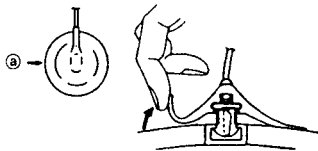
2-5. SERVICE POSITION



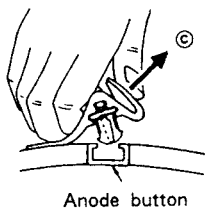
2-6. PICTURE TUBE REMOVAL



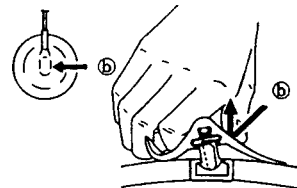
• Removing Procedures



- ① Turn up one side of the rubber cap in the direction indicated by the arrow a.



- ② Using a thumb, pull up the rubber cap firmly in the direction indicated by the arrow b.



- ③ When one side of the rubber cap is separated from the anode button, the anode cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow c.

SECTION 3

SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

The control and switch below should be set as follows unless otherwise noted :

- CONTRAST control 80% (or Normal by Commander)
- ☼ BRIGHTNESS control 50%

Perform the adjustments in order as follows :

1. Beam Landing
2. Convergence
3. Focus
4. White Balance

Note : Test Equipment Required.

1. Color Bar Pattern Generator
2. Degausser
3. DC Power Supply
4. Digital multimeter
5. Oscilloscope

Precaution

- Set the side of the unit with the PICTURE TUBE so that it faces east or west in order to reduce the influence of external magnetic force.
- Turn the power switch for the unit ON and erase the magnetic force using a degausser.

3-1. BEAM LANDING

1. Input a raster signal with the pattern generator.
CONTRAST normal
BRIGHTNESS normal
2. Turn the raster signal of the pattern generator to red.
3. Move the deflection yoke backward, and adjust with the purity control so that red is in the center and blue and green are at the sides, evenly. (Fig. 3-1 to 3-3)
4. Move the deflection yoke forward, and adjust so that the entire screen becomes red. (Fig. 3-1)
5. Switch over the raster signal to blue and green and confirm the condition.
6. When the position of the deflection yoke is determined, tighten it with a deflection yoke mounting screw.
7. When landing at the corners is not right, adjust by using the magnet. (Fig. 3-4)

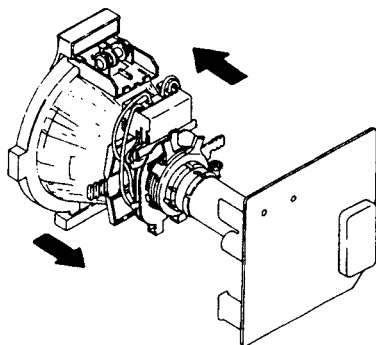


Fig. 3-1

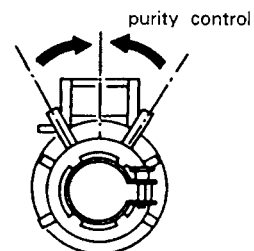


Fig. 3-2

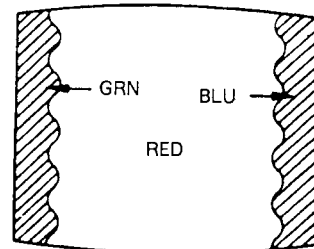


Fig. 3-3

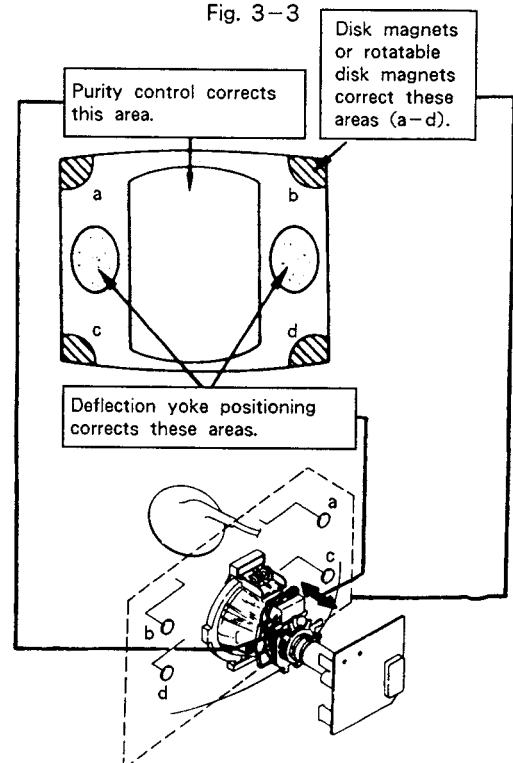


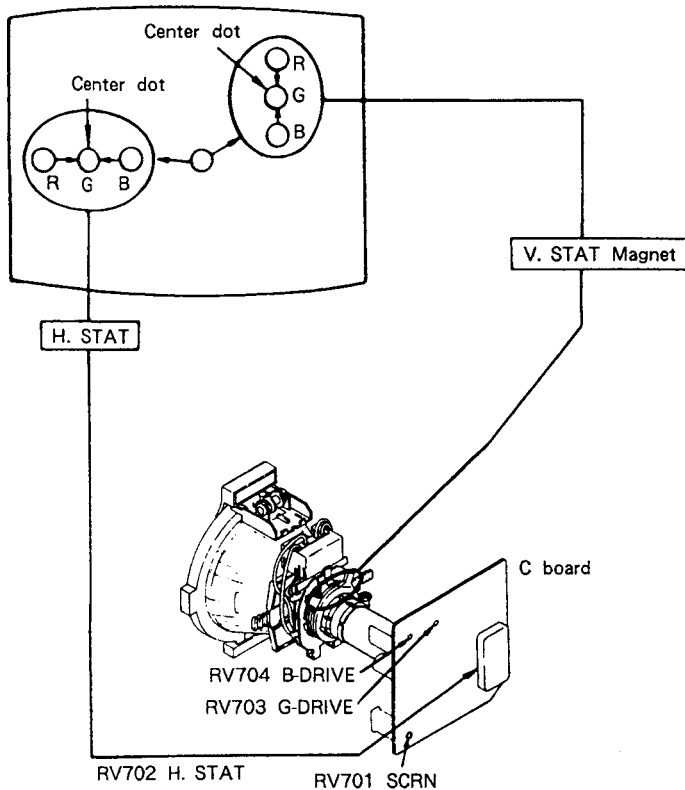
Fig. 3-4

3-2. CONVERGENCE

Preparation :

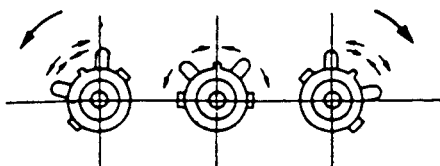
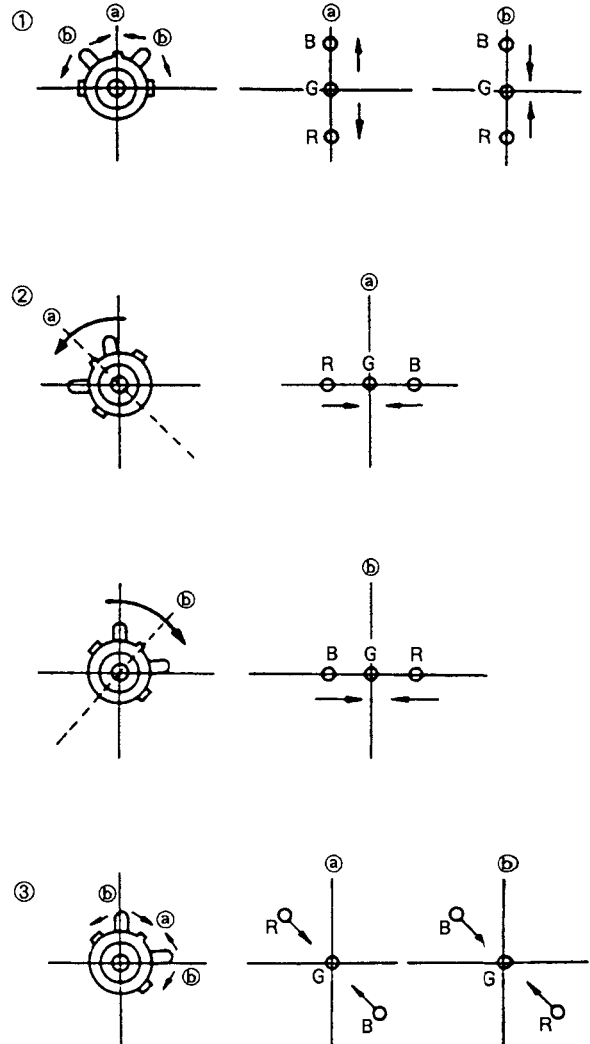
- Before starting, perform FOCUS, H. SIZE and V. SIZE adjustments.
- Set BRIGHTNESS control to minimum.
- Feed in the dot pattern.

(1) Horizontal and Vertical Static Convergence

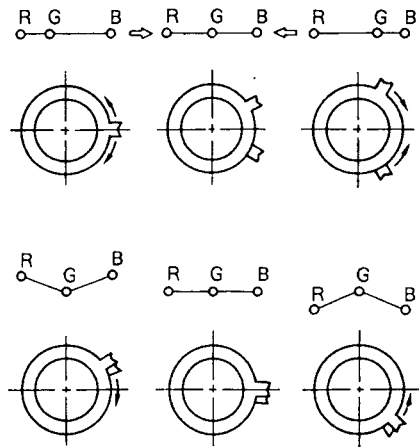


1. Adjust H. STAT VR to coincide red, green and blue dots on the center of screen. (Horizontal movement)
 2. Adjust V. STAT magnet to coincide red, green and blue dots on the center of screen. (Vertical movement)
 3. If the red, green and blue dots do not coincide on the center of screen with H. STAT VR, perform horizontal convergence adjustment using H. STAT VR and V. STAT magnet as shown below. (In this case, H. STAT VR and V. STAT magnet effect each other.)
- Tilt the V. STAT magnet and adjust static convergence to open or close the V. STAT magnet.

4. When the V. STAT magnet is moved in the direction of arrow ① and ②, red, green and blue dots move as shown below.

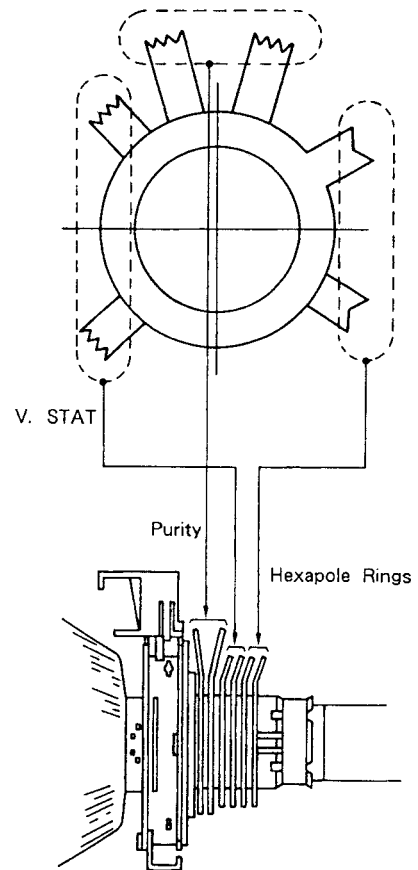


• Operation of Hexapole Ringed Magnet



The respective dot operations resulting from the operation of each magnet are not completely independent, so be sure to perform adjustment while tracking.

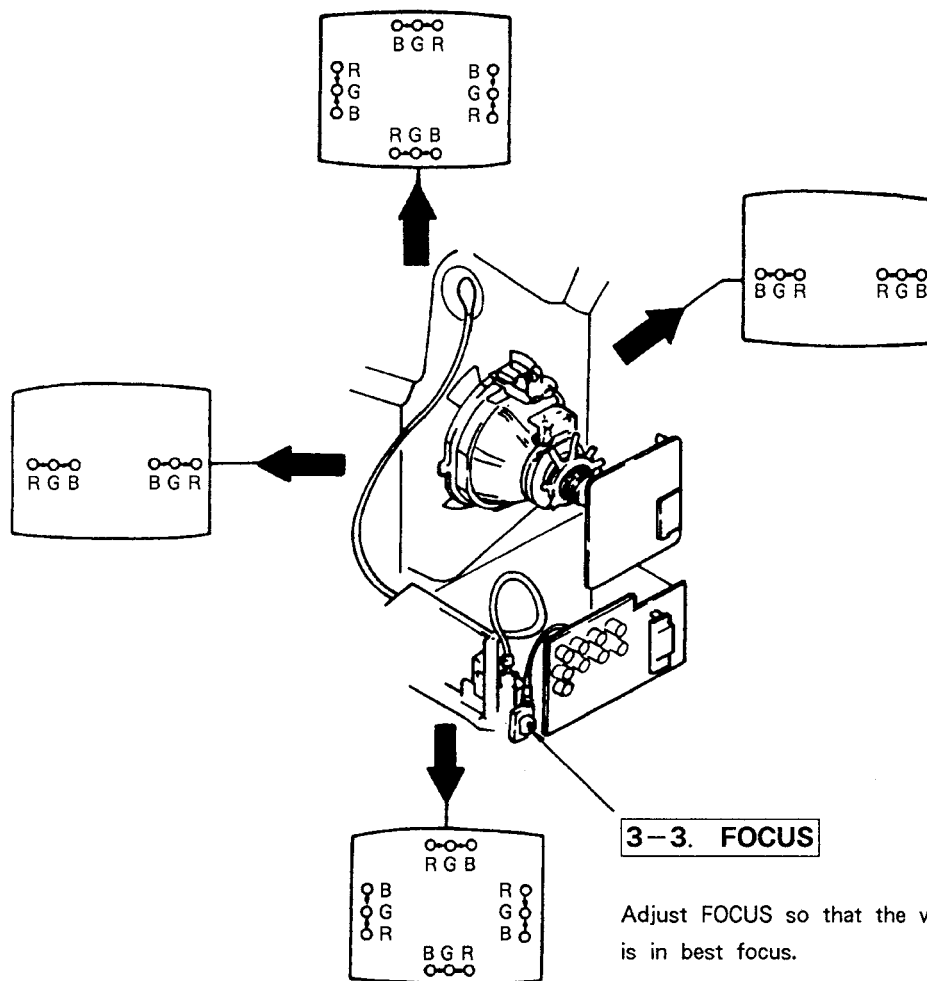
Use the H. STAT VR to adjust the red, green, and blue dots so they coincide at the center of screen (by moving the dots in the horizontal direction).



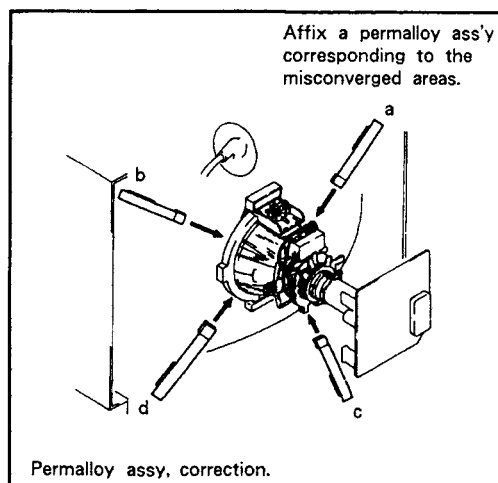
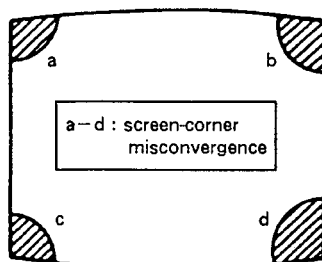
(2) Dynamic Convergence Adjustment

Preparation :

- Before starting, perform Horizontal and Vertical Static Convergence Adjustment.
1. Slightly loosen deflection yoke screw.
 2. Remove deflection yoke spacers.
 3. Move the deflection yoke for best convergence as shown below.
 4. Tighten the deflection yoke screw.
 5. Install the deflection yoke spacers.



(3) Screen-corner Convergence



3-4. WHITE BALANCE

[Screen (G2) Setting]

1. Input dot signals from the pattern generator.
2. Set the picture BRIGHTNESS control to the minimum level.
3. Apply 170 V dc to the cathodes of R, G, and B from an external power source.
4. While watching the picture, adjust the G2 volume (RV701) immediately before the fly-back line disappears.

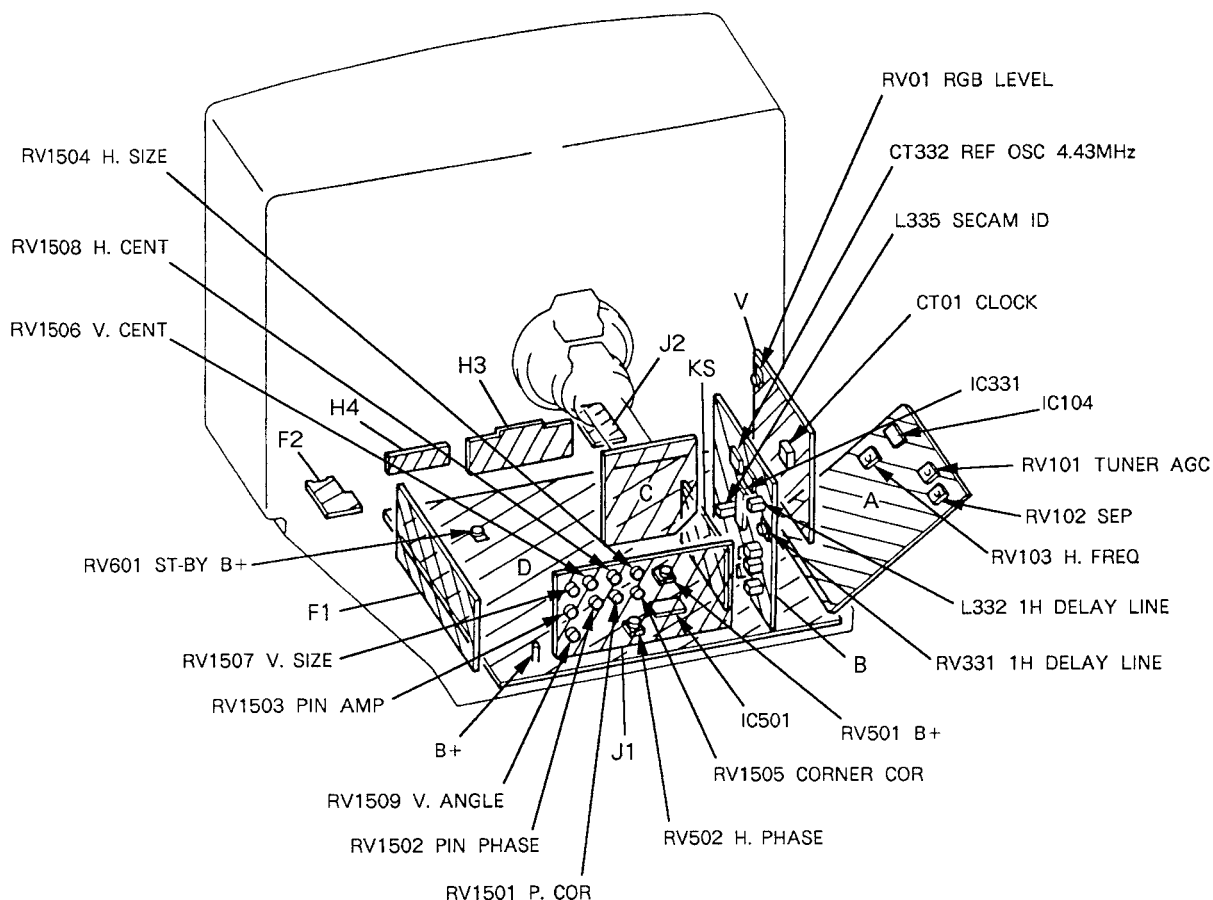
[White Balance Adjustment]

1. Input all-white signals from the pattern generator.
2. Adjust the BRIGHTNESS and COLOR controls to the standard level.
3. Adjust the white balance using RV704 (B DRIVE) and RV703 (G DRIVE).

In the following adjustments, the CONTRAST COLOR and BRIGHTNESS controls are set to normal unless otherwise specified.

SECTION 4

CIRCUIT ADJUSTMENTS



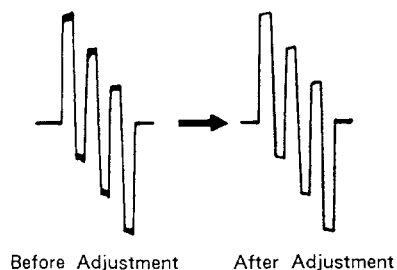
4-1. B BOARD ADJUSTMENTS

REF OSC Adjustment (CT332)

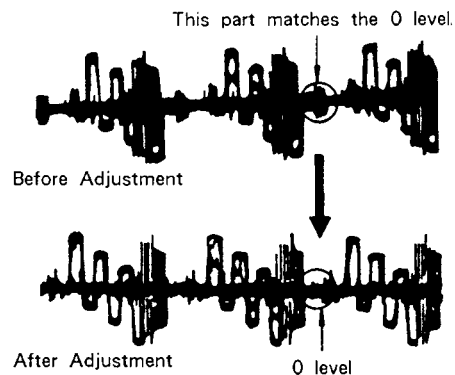
1. Input a PAL COLOR BAR pattern.
2. Short circuit between pin ⑩ of IC331 and ground.
3. Adjust CT332 to obtain color synchronization.
4. Remove the jumper wire from IC331.

1H DELAY LINE Adjustment (L332, RV331)

1. Input a PAL COLOR BAR pattern.
2. Connect the oscilloscope to pin ③ (B-Y) of IC331 and observe the waveform of the H block on the oscilloscope.
3. Adjust L332 to minimize the double waveform outline.



4. Input a PAL TEST COLOR BAR pattern.
5. Rotate the RV331 VR and adjust till the ANTI-PAL part of the waveform matches the 0 level.



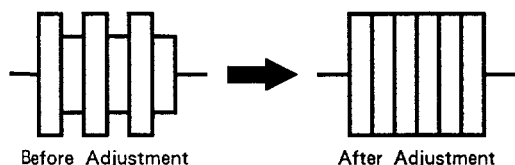
6. L332 and RV331 affect each other. So repeat till the conditions of both are met.

SECAM ID Adjustment (L335)

1. Input a SECAM COLOR BAR pattern.
2. Connect a Digital Multimeter to pin ② of IC331.
3. Adjust L335 so that the indicator goes up to the maximum.

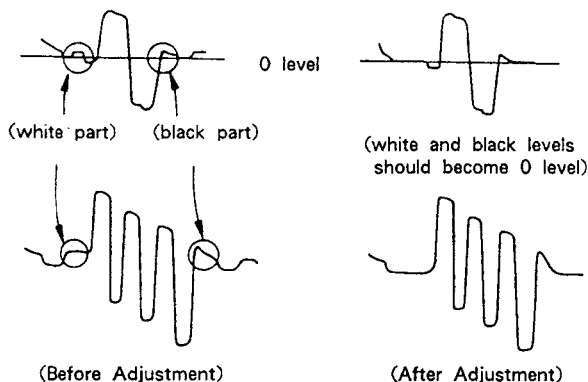
BELL FILTER Adjustment (T331)

1. Input a SECAM COLOR BAR pattern.
2. Connect an oscilloscope to the Q335 emitter.
3. Adjust T331 so that the waveform becomes flat.



SECAM DISCRI Adjustment (L333, L334)

1. Input a SECAM COLOR BAR pattern.
2. Connect an oscilloscope to pin ① of IC331.
3. Adjust L333 so that white and black parts of the waveform of pin ① becomes 0 level.
4. Connect an oscilloscope to pin ③ of IC331.
5. Adjust L334 so that white and black parts of the waveform of pin ③ becomes 0 level.



4-2. D BOARD ADJUSTMENTS

B+ Adjustment (RV501)

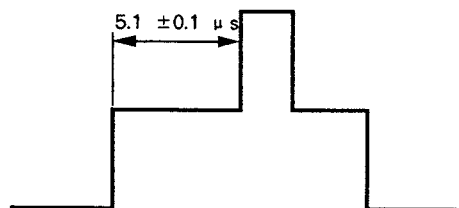
1. Connect a Digital Multimeter to TP91.
2. Adjust RV501 so that the voltage becomes 135 ± 0.2 V.

ST-BY B+ Adjustment (RV601)

1. Set up \cup standby (Remote Commander) mode.
2. Connect the Digital Multimeter to TP91.
3. Adjust RV601 so that the voltage becomes 135 ± 3 V.
4. Release the \cup standby (Remote Commander) mode.

H. PHASE Adjustment (RV502)

1. Input a PAL TEST COLOR BAR pattern.
2. Set the CONTRAST and BRIGHTNESS controls to the standard positions.
3. Set RV1508 (H. CENT) to the mechanical center position.
4. Connect an oscilloscope to pin ⑪ (SPC OUT) of IC501.
5. Rotate RV502 and adjust Block T to 5.1 ± 0.1 μ s.



4-3. A BOARD ADJUSTMENTS

TUNER AGC Adjustment (RV101)

1. Tune in an off-air signal.
2. Adjust RV101 so that snow-noise and cross-modulation just disappear from the picture.

STEREO SEPARATION Adjustment (RV102)

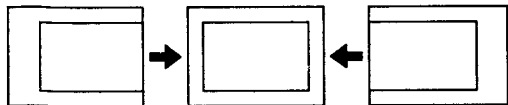
1. Input stereo signals. (L-CH 1 kHz, R-CH 400 Hz)
2. Check the stereo indicator.
3. Connect an oscilloscope to pin ① (L) of CNA11 through band pass filter of 1 kHz.
4. Adjust RV102 so that 1 kHz voltage goes down to the minimum.

H. FREQ Adjustment (RV103)

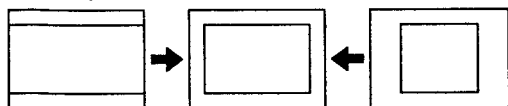
1. Input a PAL COLOR BAR pattern.
2. Short circuit between pin ⑫ of IC104 and ground.
3. Connect a frequency counter to pin ⑥ of IC104 through a probe of 10:1.
4. Adjust RV103 so that H. frequency becomes $15,625 \pm 50$ Hz.

4-4. J₁ BOARD ADJUSTMENTS

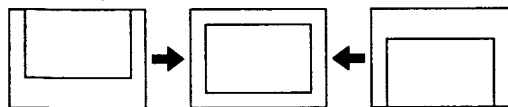
RV1508
H. CENT (HORIZONTAL CENTER)



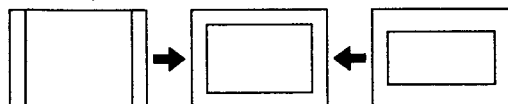
RV1504
H. SIZE (HORIZONTAL SIZE)



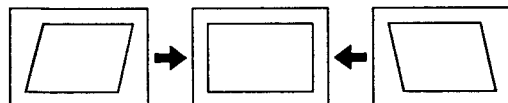
RV1506
V. CENT (VERTICAL CENTER)



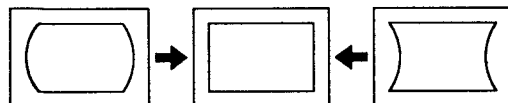
RV1507
V. SIZE (VERTICAL SIZE)



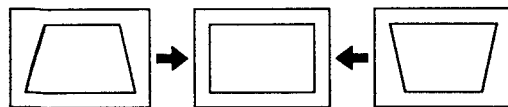
RV1509
V. ANGLE (VERTICAL ANGLE)



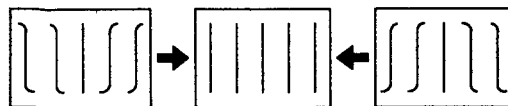
RV1503
PIN AMP (PINCUSHION AMPLIFIER)



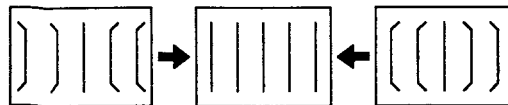
RV1502
PIN PHASE (PINCUSHION PHASE)



RV1501
PIN COR (PINCUSHION CORRECT)



RV1505
CORNER COR (CORNER CORRECT)



4-5. V BOARD ADJUSTMENTS

Clock Adjustment (CT01)

1. Disconnect the V-1 connector.
2. Set up the TELE TEXT mode.
3. Adjust CT01 to stop pictures from scrolling.

RGB Level Adjustment (RV01)

1. Set PICTURE to maximum.
2. Adjust RV01 till the RGB output becomes 0.75 V.

4-6. SUB ADJUSTMENTS

SUB BRIGHTNESS Adjustment

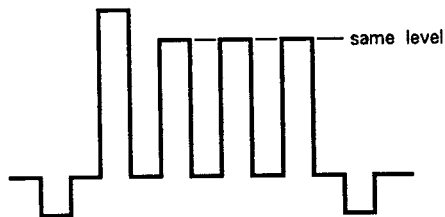
1. Receive and display a TEST COLOR BAR pattern.
2. Push →•← on the remote commander to invoke the normal state.
3. Turn off the power supply.
4. Turn on the power supply while pushing the SUB button (S1414). (SUB mode is invoked.)
5. Reduce the CONTRAST to the minimum level.
6. Adjust the BRIGHTNESS control until the 0 IRE of the gray scale becomes completely cut off, and the 20 IRE becomes barely luminous.
7. Push the AFT button. (SUB mode is cleared)

Where no TEST COLOR BAR pattern is available.

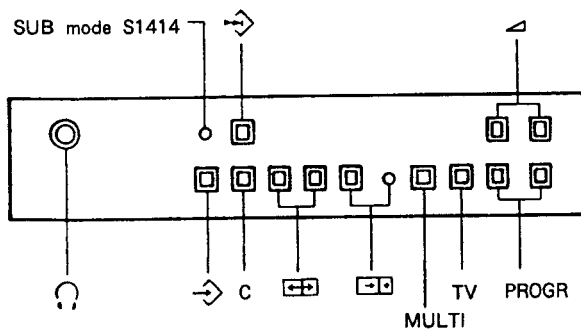
1. Display a COLOR BAR pattern.
 2. Push →•← on the remote commander to invoke the normal state.
Set the COLOR to normal mode.
- Steps 3 - 5 are the same as above.
6. 20 IRE is close to blue, so adjust the BRIGHTNESS control till blue is faintly luminous.
 7. Same as Step 7 above.
 8. Push →•← on the remote commander to invoke the normal state.
- * When Step 4 is executed correctly, S (SUB mode) is displayed at the upper right of the display. As S is displayed only for 30 seconds, perform the adjustment within 30 seconds, or repeat from Step 4.

SUB COLOR Adjustment

1. Display a COLOR BAR pattern.
2. Push →•← on the remote commander to invoke the normal state.
3. Turn off the power supply.
4. Turn on the power supply while pushing the SUB button (S1414). (SUB mode is invoked.)
5. Adjust the COLOR control until the B out (pin ② of CNC72 connector on C board) waveform becomes as shown below.
6. Push the AFT button. (SUB mode is cleared.)

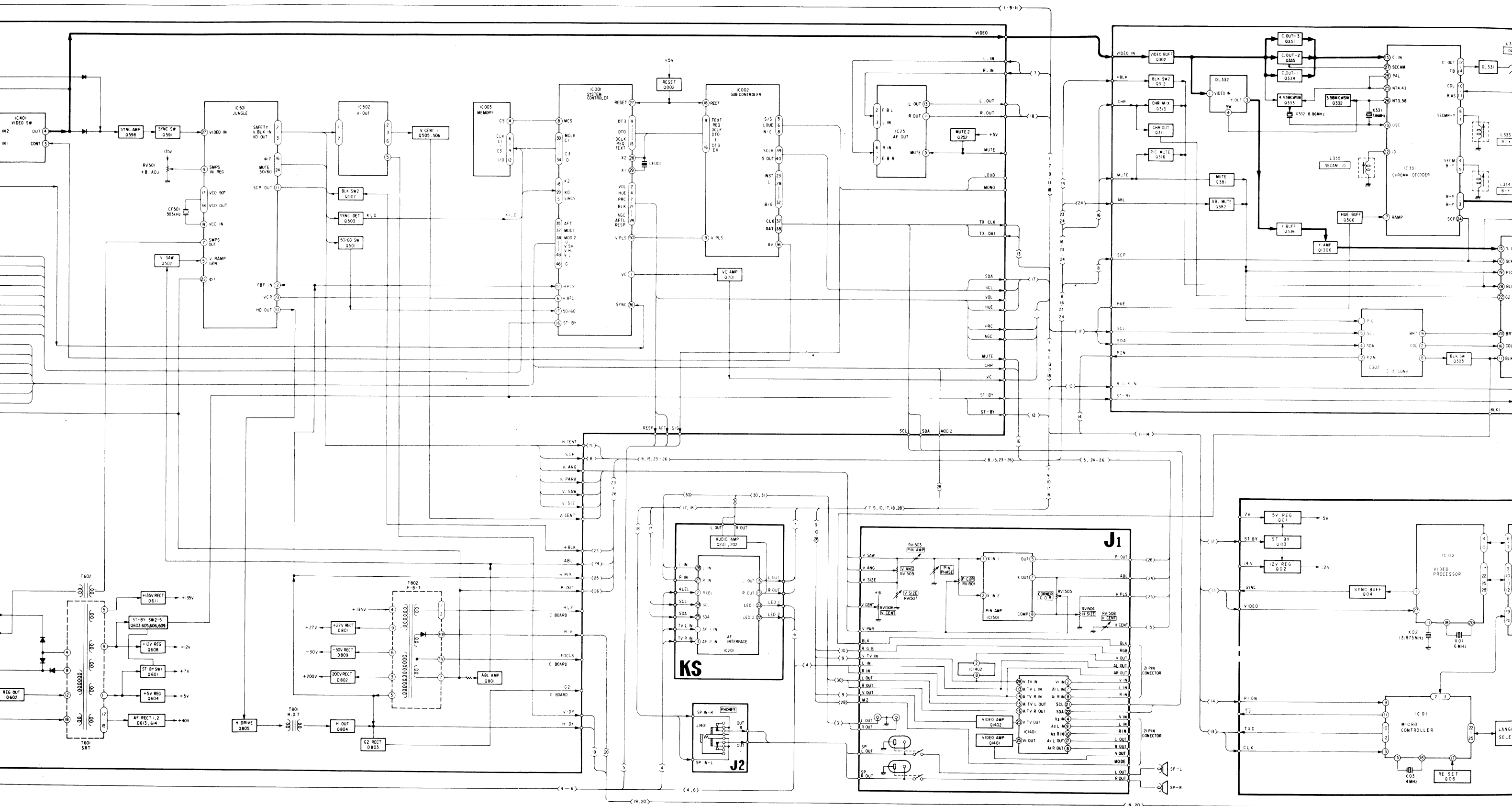


* When Step 4 is executed correctly, S (SUB mode) is displayed at the upper right of the display. As S (SUB mode) is displayed only for 30 seconds, perform the adjustment with 30 seconds, or repeat from Step 4.



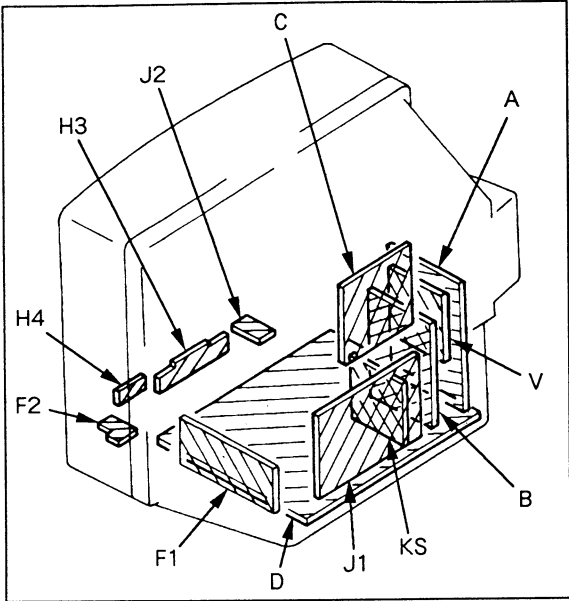
1







5-2. CIRCUIT BOARDS LOCATION



Note :

- All capacitors are in μF unless otherwise noted.
pF : μF 50 WV or less are not indicated except for electrolytics.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch : 5 mm
Rating electrical power 1/4W

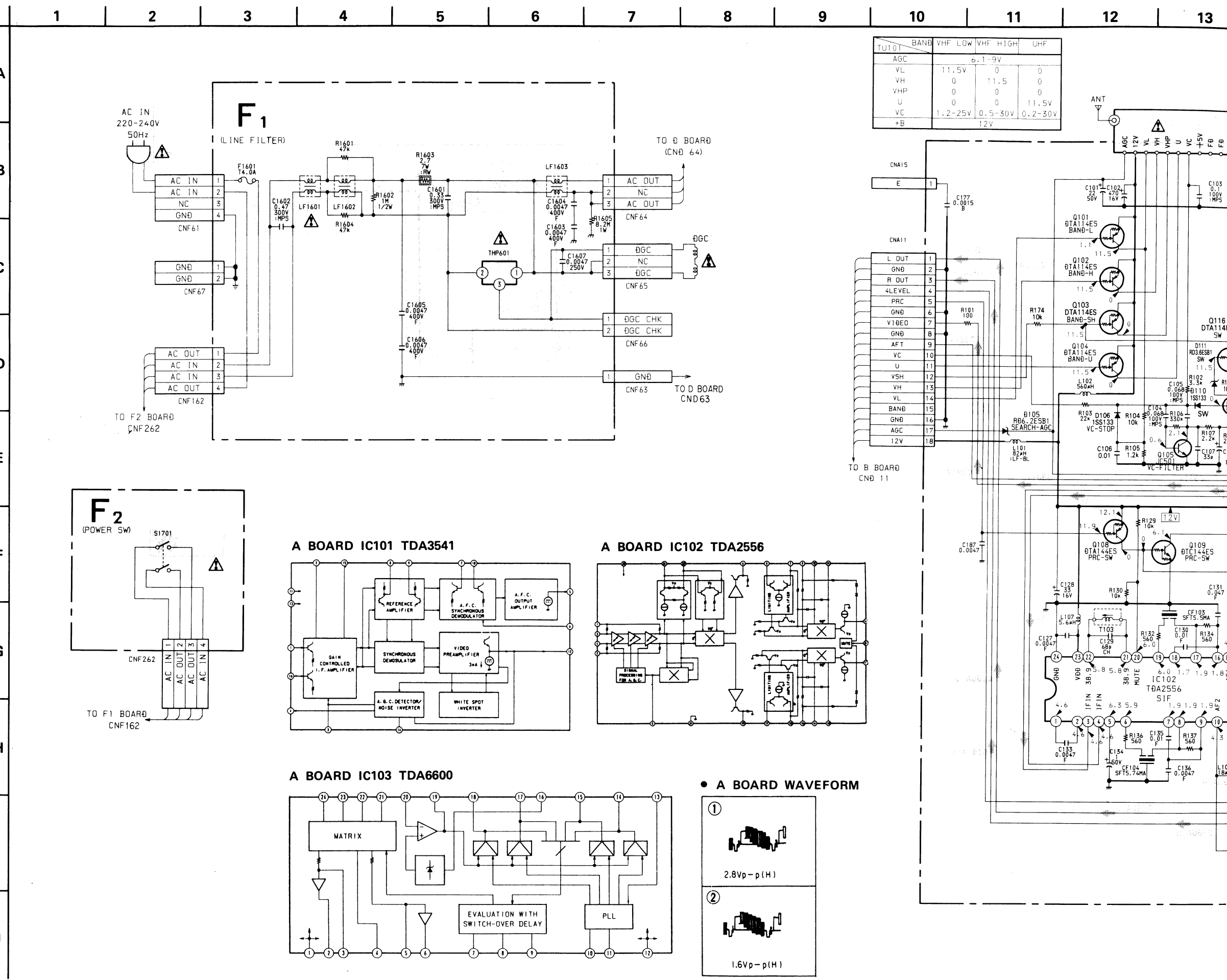
- All resistors are in ohms.
- : nonflammable resistor.
- : fusible resistor.
- : internal component.
- : panel designation.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- All voltages are in V.
- Readings are taken with a 10 M Ω digital multimeter.
- Readings are taken with a PAL color-bar signal input.
- : adjustment for repair.
- Voltage variations may be noted due to normal production tolerance.
- : B+ bus.
- : B- bus.
- : signal path.

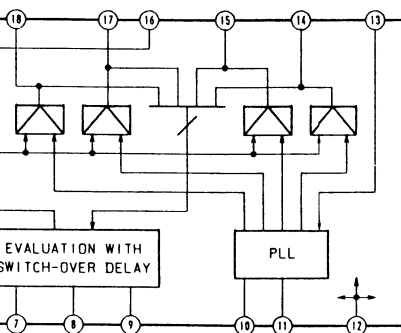
Reference information

| | | |
|-----------|---------|--------------------------|
| RESISTOR | : RN | METAL FILM |
| | : RC | SOLID |
| | : FPRD | NONFLAMMABLE CARBON |
| | : FUSE | NONFLAMMABLE FUSIBLE |
| | : RW | NONFLAMMABLE WIREWOUND |
| | : RS | NONFLAMMABLE METAL OXIDE |
| | : RB | NONFLAMMABLE CEMENT |
| COIL | : LF-8L | MICRO INDUCTOR |
| CAPACITOR | : TA | TANTALUM |
| | : PS | STYROL |
| | : PP | POLYPROPYLENE |
| | : PT | MYLAR |
| | : MPS | METALIZED POLYESTER |
| | : MPP | METALIZED POLYPROPYLENE |
| | : ALB | BIPOLAR |
| | : ALT | HIGH TEMPERATURE |
| | : ALR | HIGH RIPPLE |

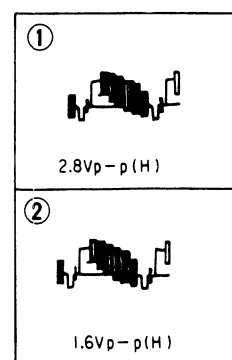
Note: The components identified by shading and mark are critical for safety. Replace only with part number specified.

5-3. SCHEMATIC DIAGRAMS

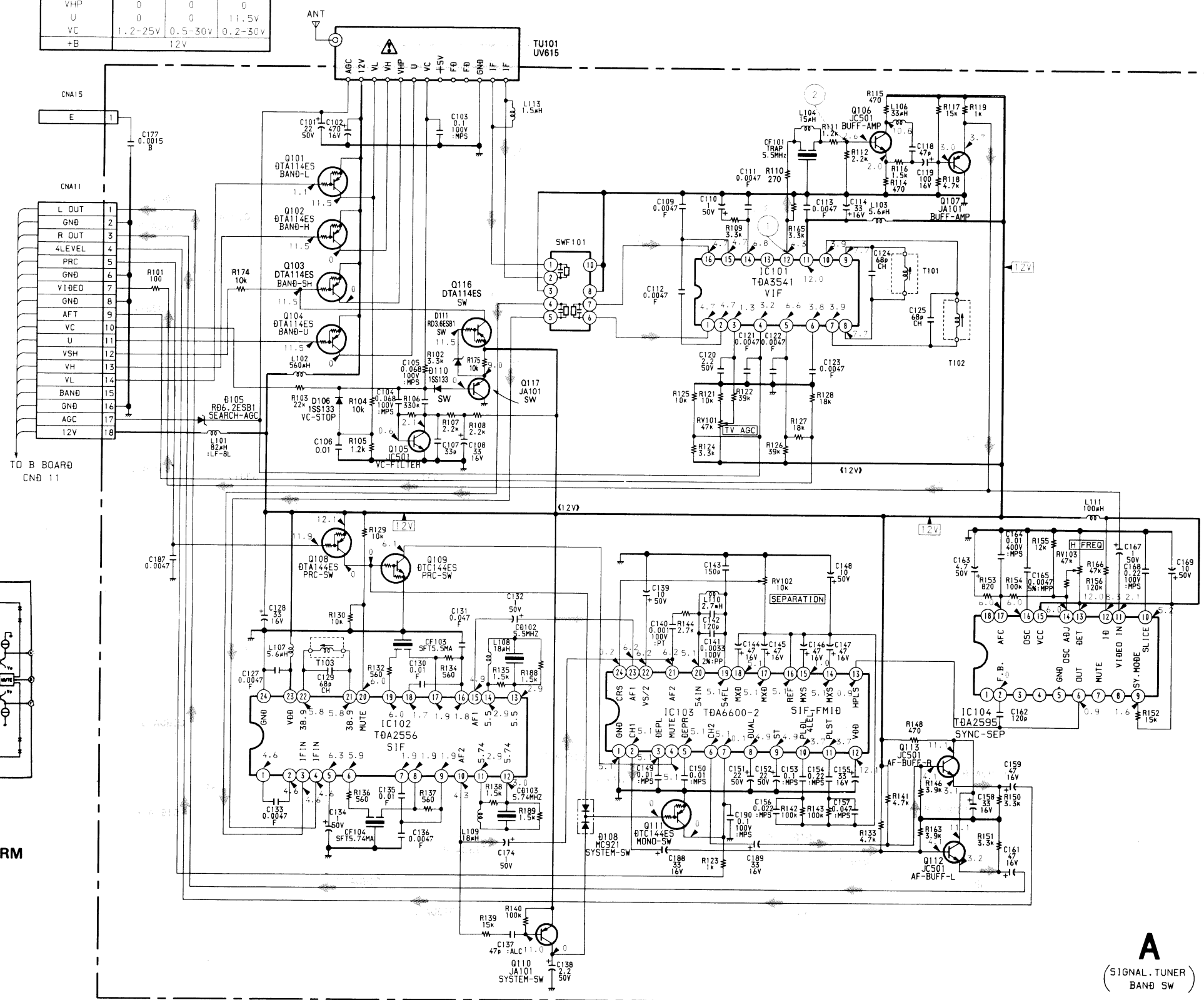




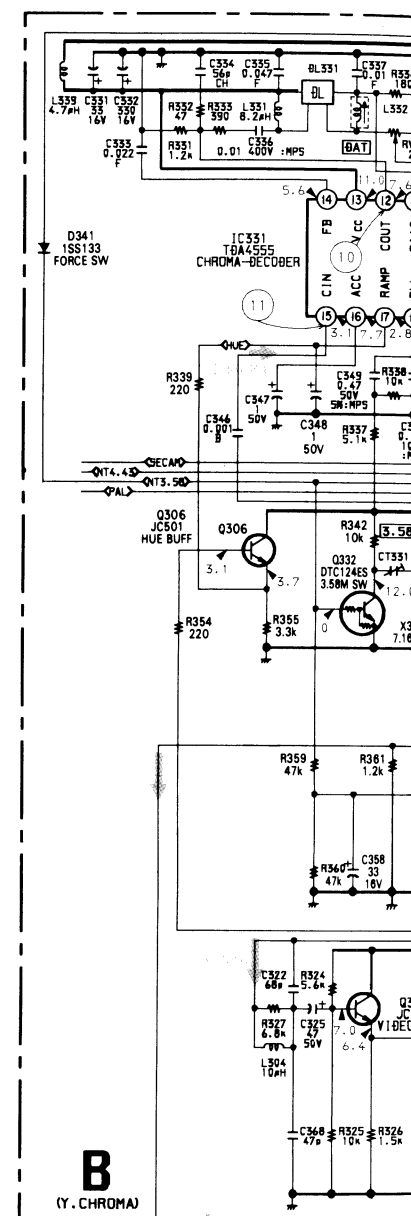
- **A BOARD WAVEFORM**



| TU101 | BAND | VHF LOW | VHF HIGH | UHF |
|-------|------|---------|----------|---------|
| AGC | | 6.1-9V | | |
| VL | | 11.5V | 0 | 0 |
| VH | | 0 | 11.5 | 0 |
| VHP | | 0 | 0 | 0 |
| U | | 0 | 0 | 11.5V |
| VC | | 1.2-25V | 0.5-30V | 0.2-30V |
| +B | | 12V | | |

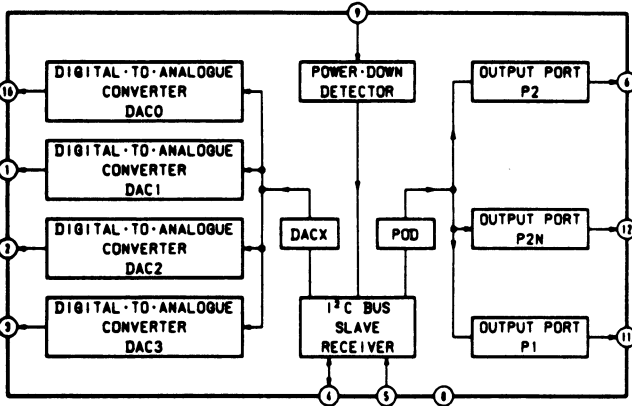


A
(SIGNAL.TUNER)
BAND SW

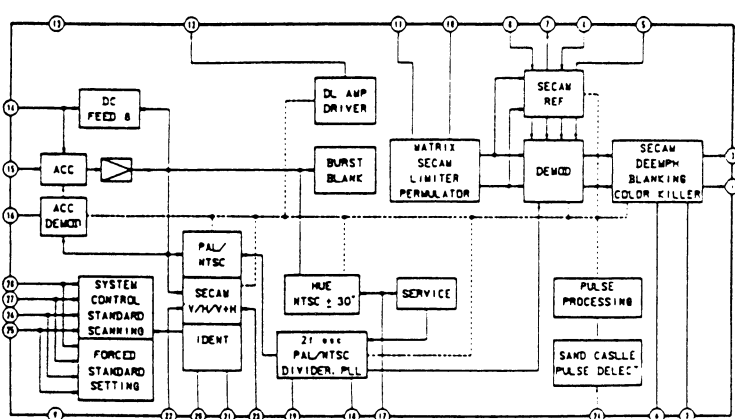


B
(Y, CHROMA)

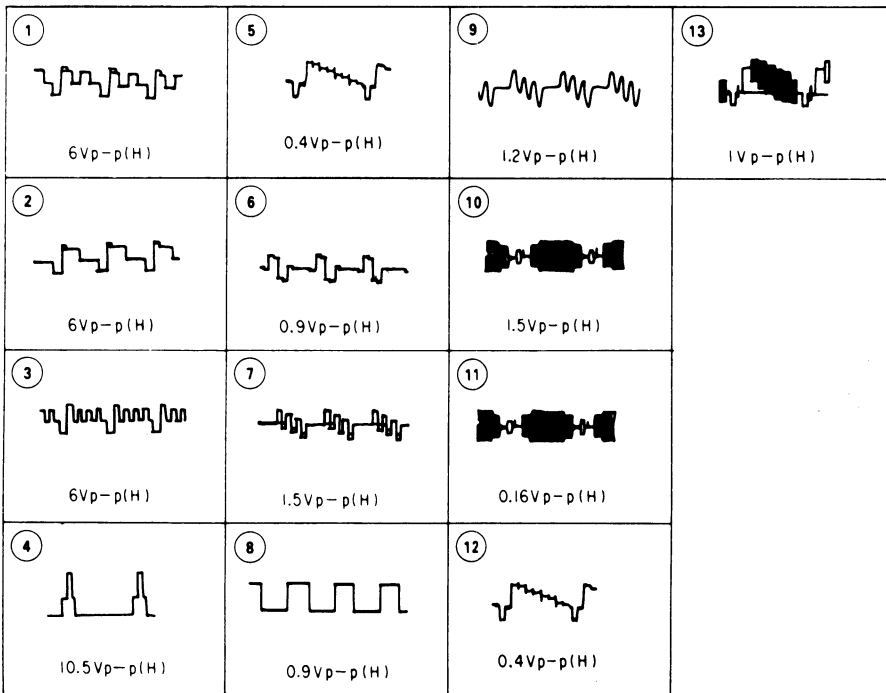
B BOARD IC302 TDA8442



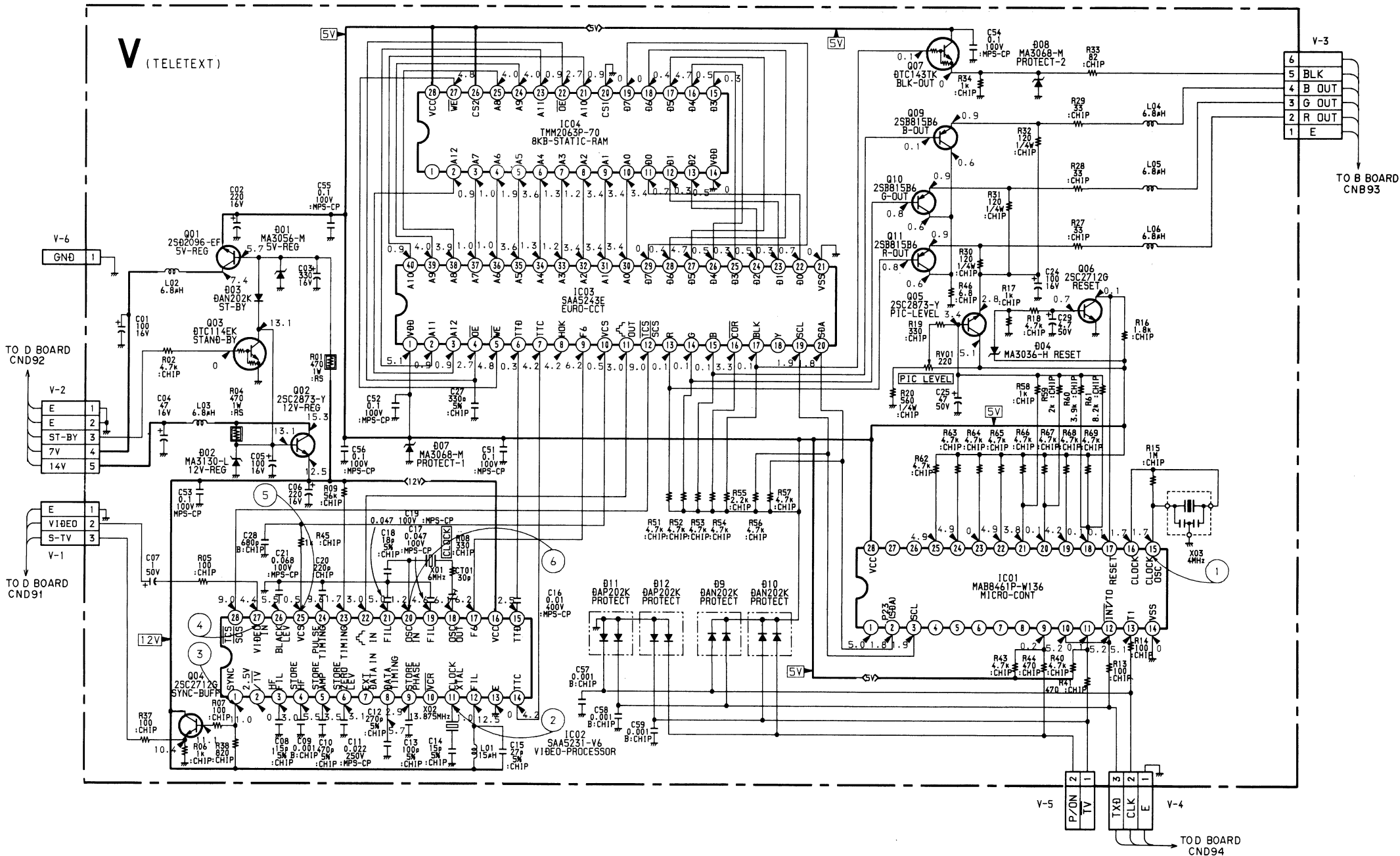
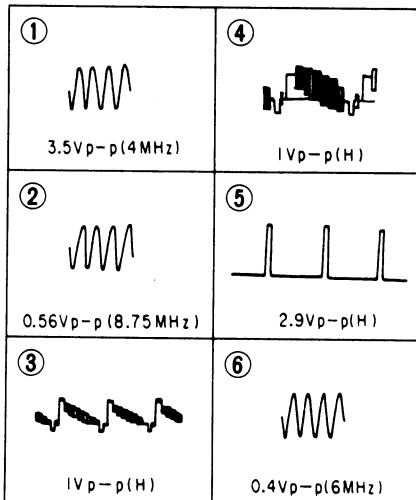
B BOARD IC331 TDA4555

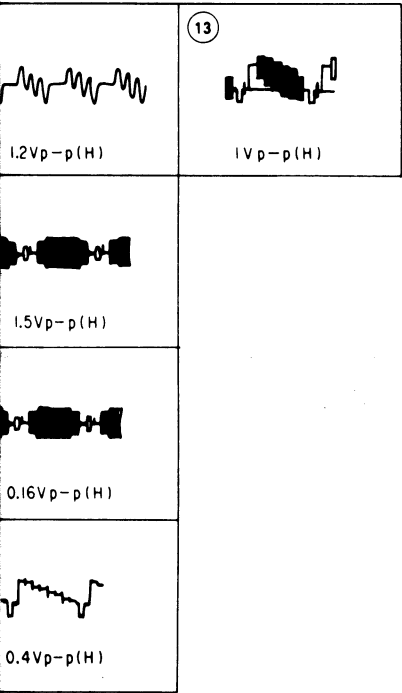


• B BOARD WAVEFORM

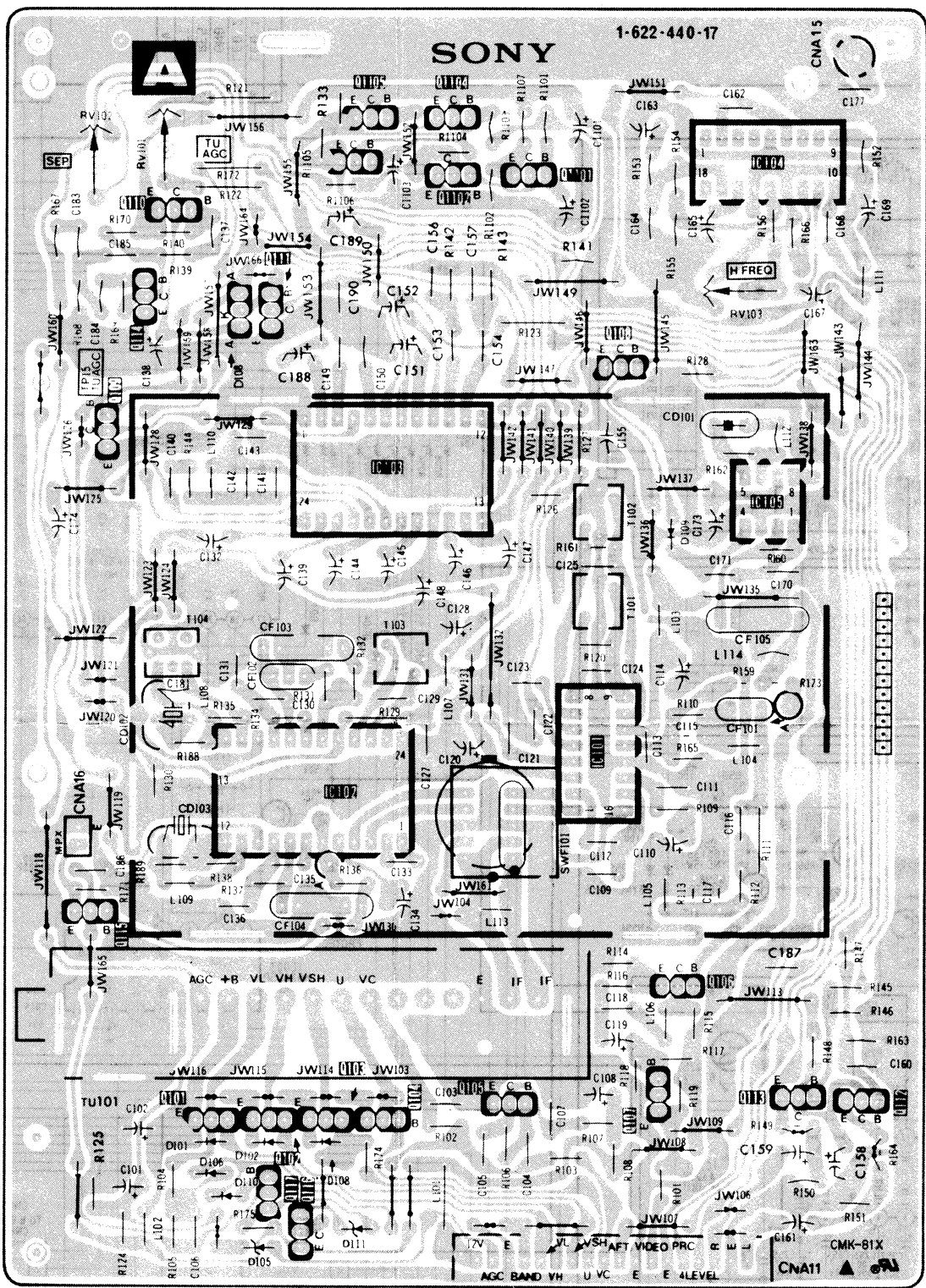


• V BOARD WAVEFORM

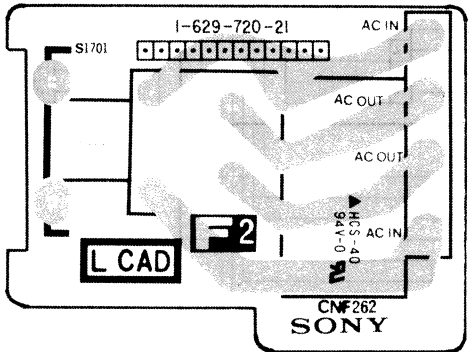




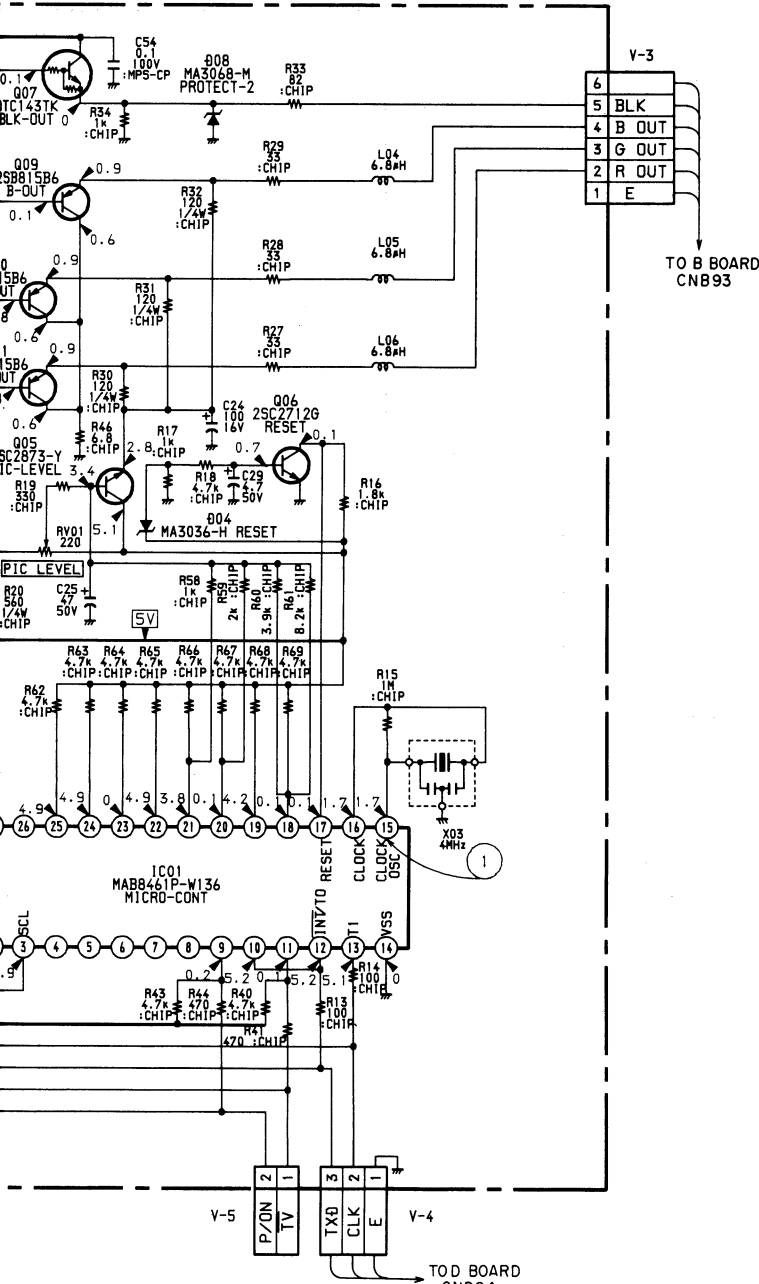
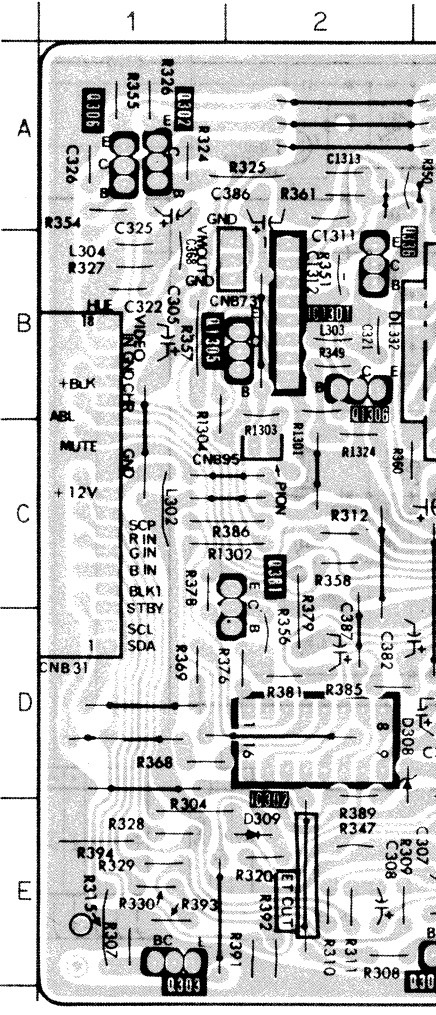
— A Board —

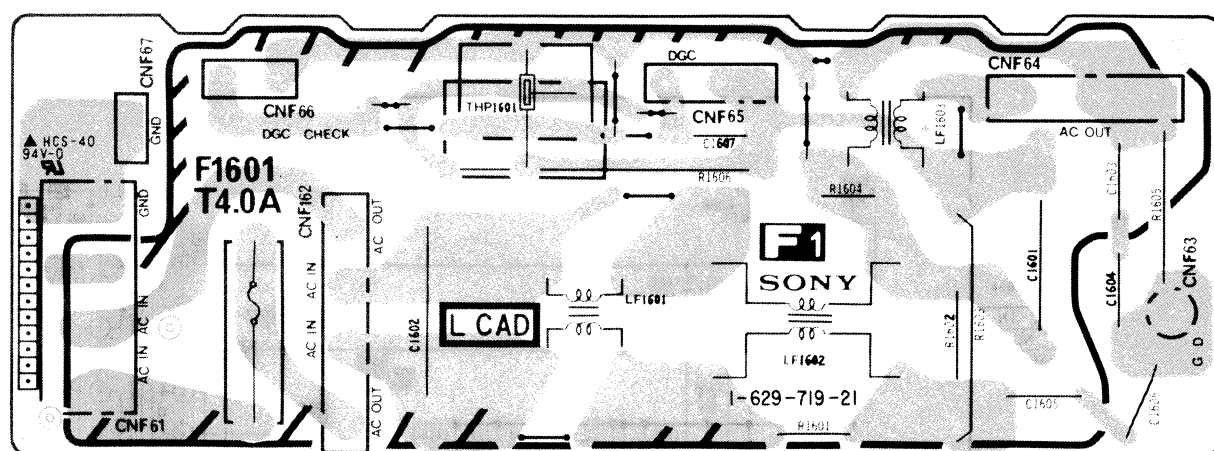


— F2 Board —

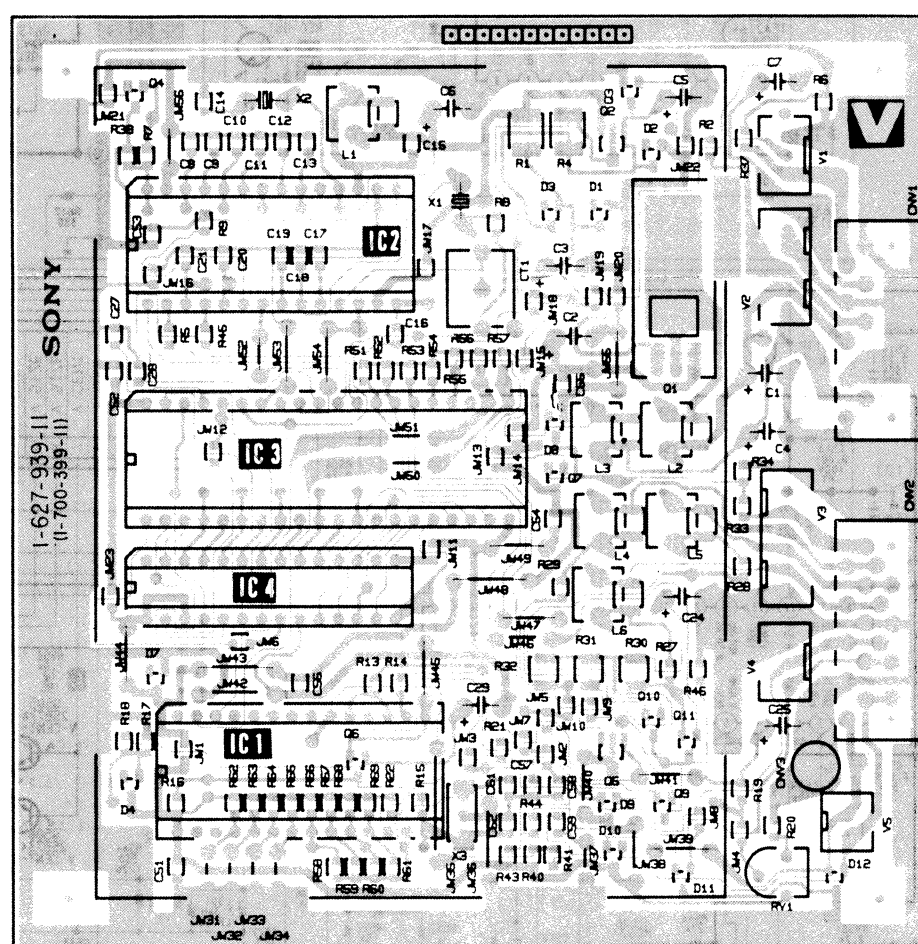


— B Board —

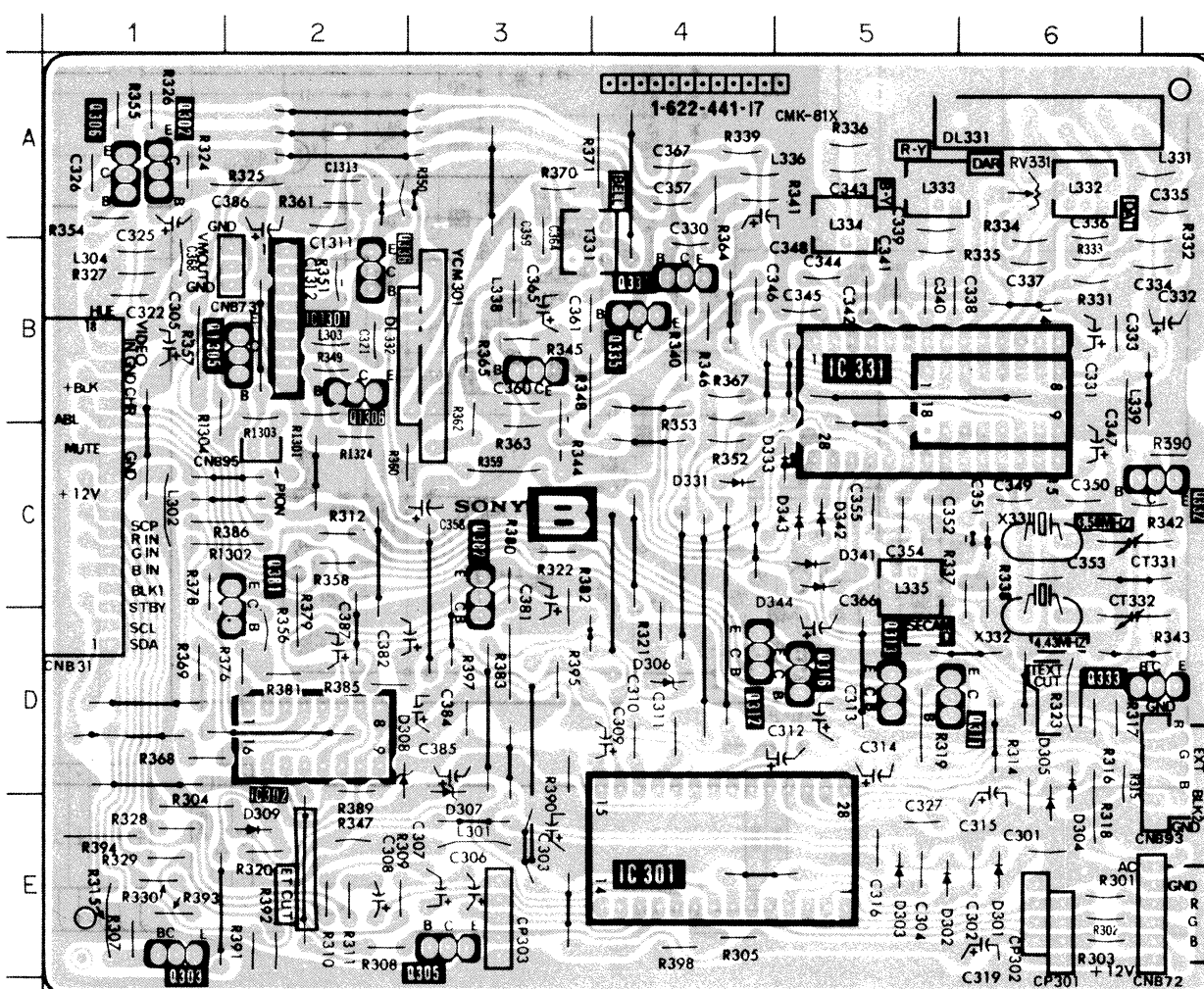




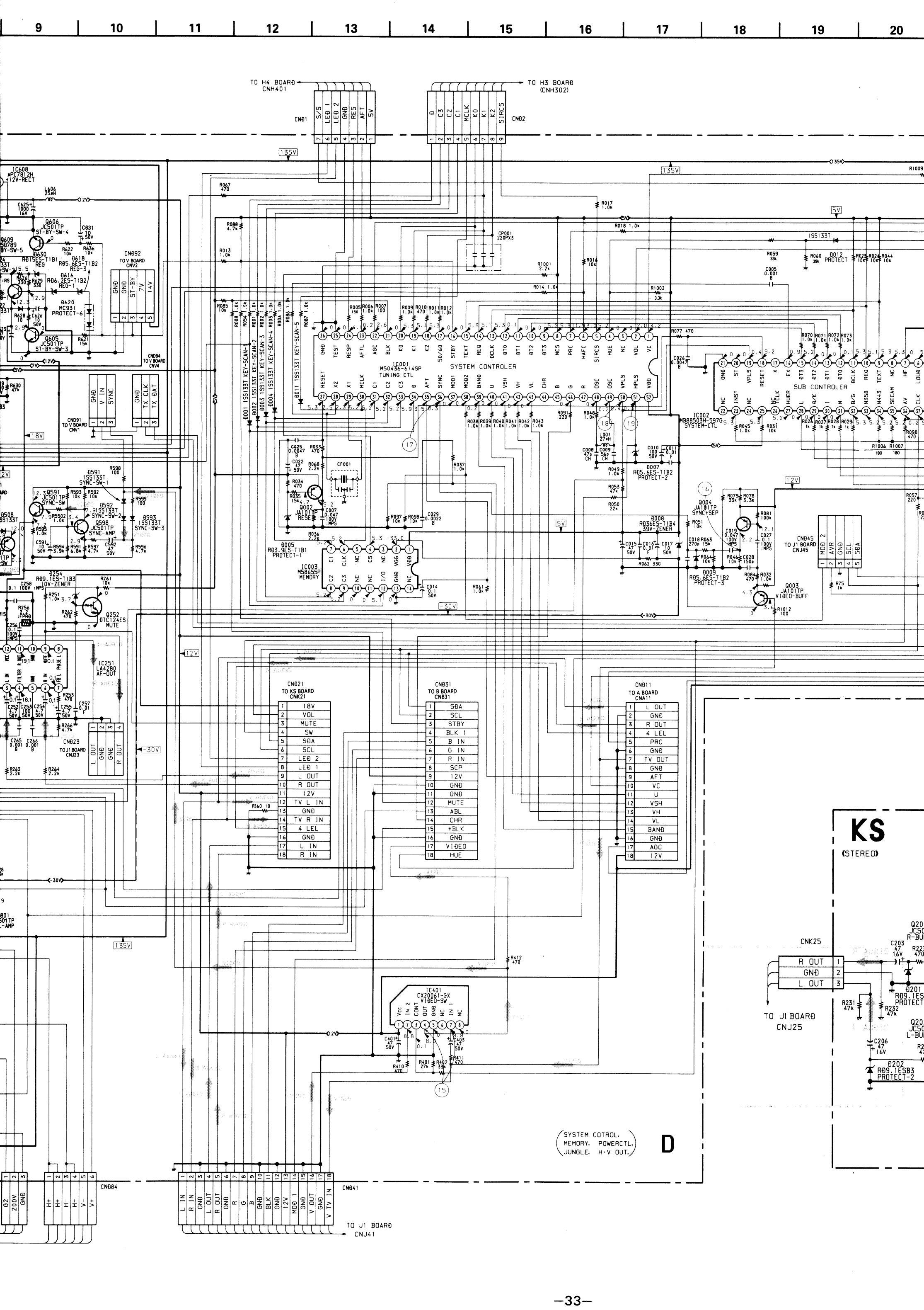
— V Board —



– B Board –



| IC | | DIODE | |
|------------|-----|-------------------|-----|
| IC301 | E-4 | D301 | E-6 |
| IC302 | D-2 | D302 | E-5 |
| IC331 | B-5 | D303 | E-5 |
| | | D304 | E-6 |
| | | D305 | E-6 |
| TRANSISTOR | | | |
| Q302 | A-1 | D307 | E-3 |
| Q303 | E-1 | D309 | E-2 |
| Q305 | E-3 | D331 | C-4 |
| Q306 | A-1 | D333 | C-5 |
| Q311 | D-5 | D341 | C-5 |
| Q312 | D-4 | | |
| Q313 | D-5 | VARIABLE RESISTOR | |
| Q316 | D-5 | RV331 | A-6 |
| Q331 | B-4 | | |
| Q332 | C-6 | CT331 | C-6 |
| Q333 | D-6 | CT332 | D-6 |
| Q334 | B-3 | | |
| Q335 | B-4 | | |
| Q336 | B-2 | | |
| Q381 | C-2 | | |
| Q382 | C-3 | | |
| Q1316 | B-2 | | |



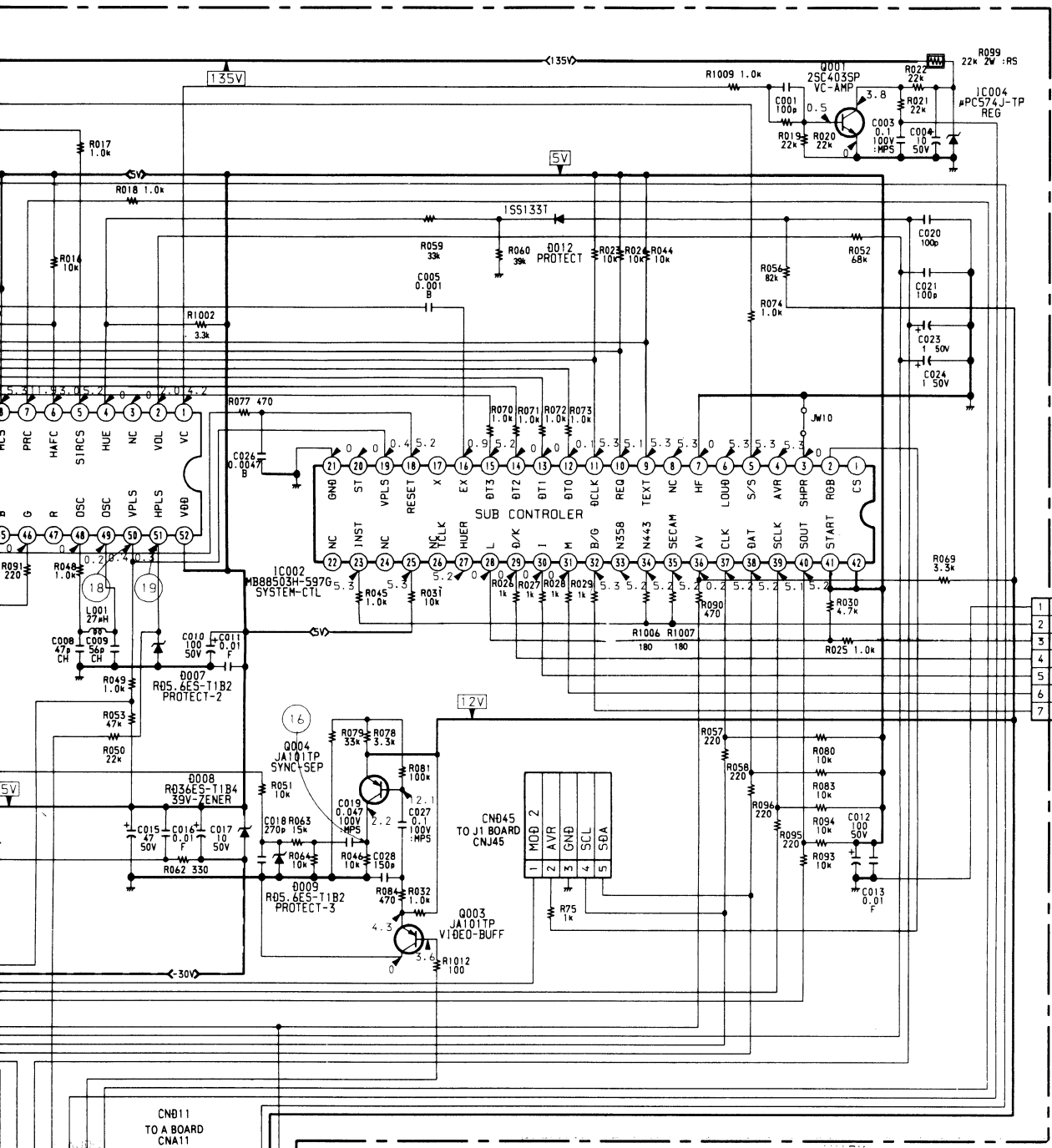
KS

(STEREO)

(SYSTEM COTROL,
MEMORY, POWERCTL,
JUNGLE, H-V OUT,

D

BOARD
02)



| | |
|---|------|
| 1 | GN0 |
| 2 | INST |
| 3 | L |
| 4 | D/K |
| 5 | I |
| 6 | M |
| 7 | B/G |

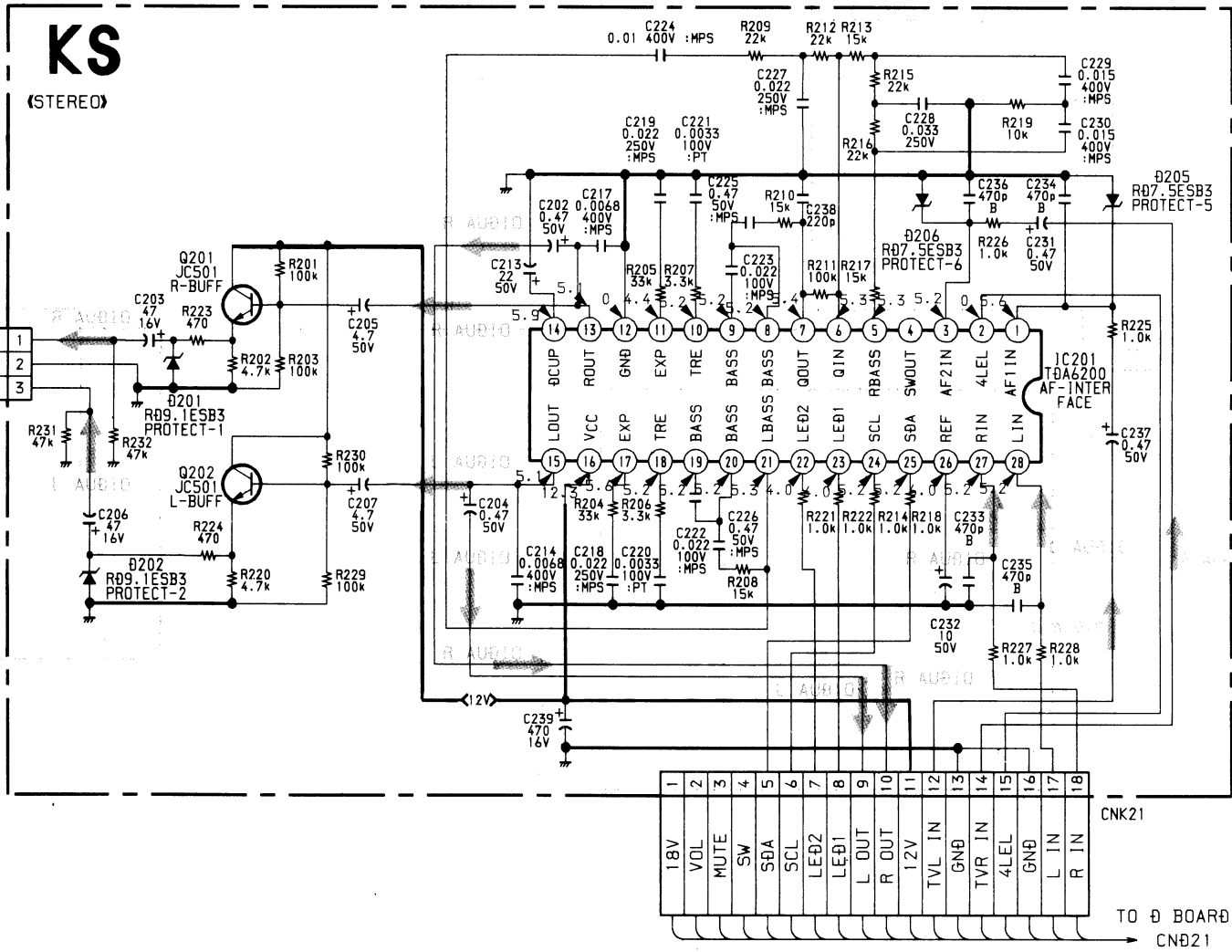
CNB12

CNB11
TO A BOARD
CNA11

| | |
|----|--------|
| 1 | L OUT |
| 2 | GN0 |
| 3 | R OUT |
| 4 | 4 LEL |
| 5 | PRC |
| 6 | GN0 |
| 7 | TV OUT |
| 8 | GN0 |
| 9 | AFT |
| 10 | VC |
| 11 | U |
| 12 | VSH |
| 13 | VH |
| 14 | VL |
| 15 | BAND |
| 16 | GN0 |
| 17 | AGC |
| 18 | 12V |

(SYSTEM CTRL.
MEMORY, POWERCTL,
JUNGLE, H-V OUT.)

D



CNK21

| | |
|----|--------|
| 1 | 18V |
| 2 | VOL |
| 3 | MUTE |
| 4 | SW |
| 5 | S0A |
| 6 | SCL |
| 7 | LED2 |
| 8 | LED1 |
| 9 | L OUT |
| 10 | R OUT |
| 11 | 12V |
| 12 | TVL IN |
| 13 | GN0 |
| 14 | TVR IN |
| 15 | 4LEL |
| 16 | GN0 |
| 17 | L IN |
| 18 | R IN |

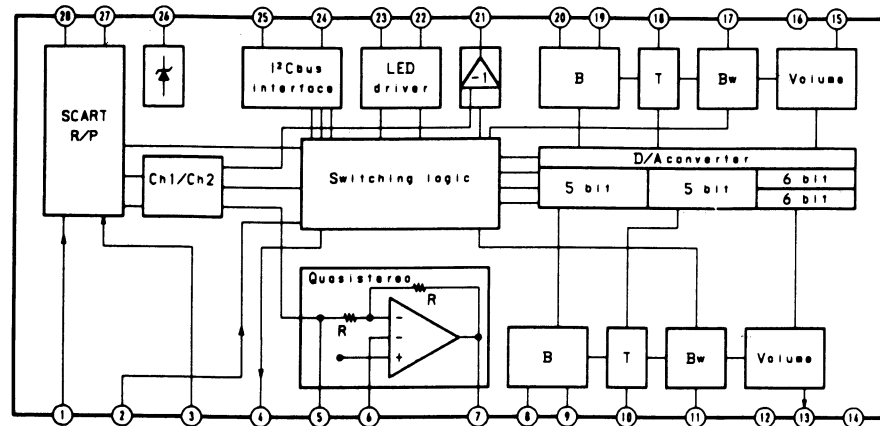
TO 0 BOARD
CN021

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

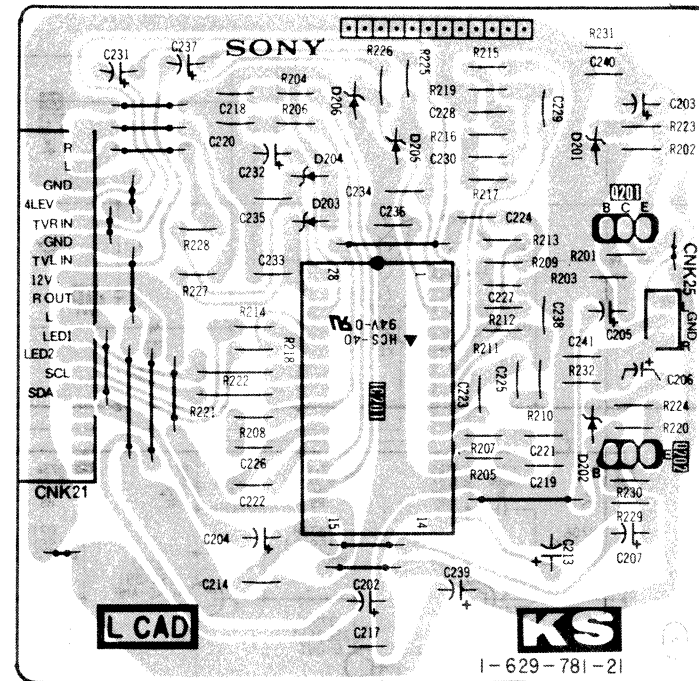
Ks [AF INTERFACE]

D [AF OUT, Y-CHROMA,
JUNGLE, V-H DEF]

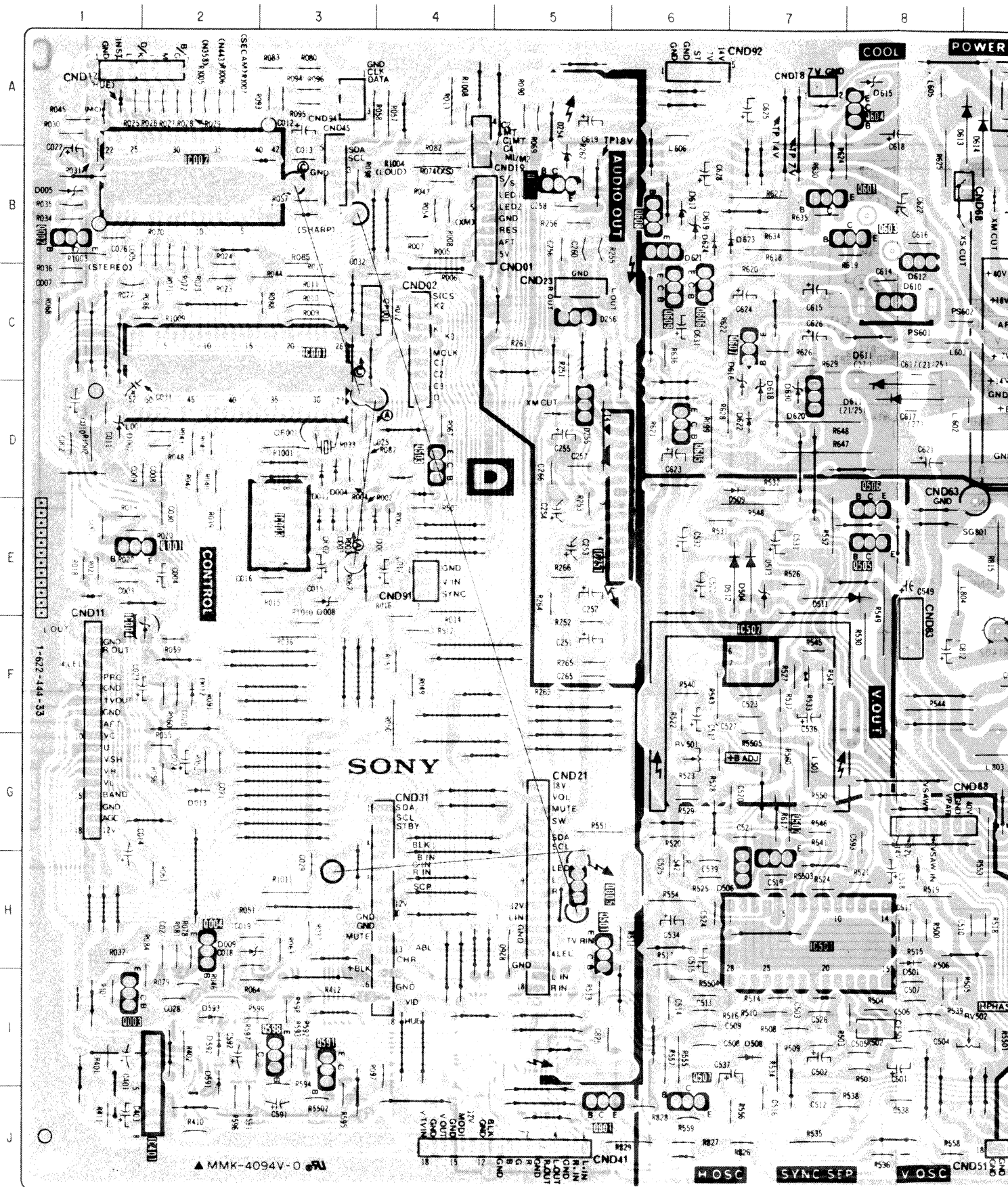
KS BOARD IC201 TDA6200



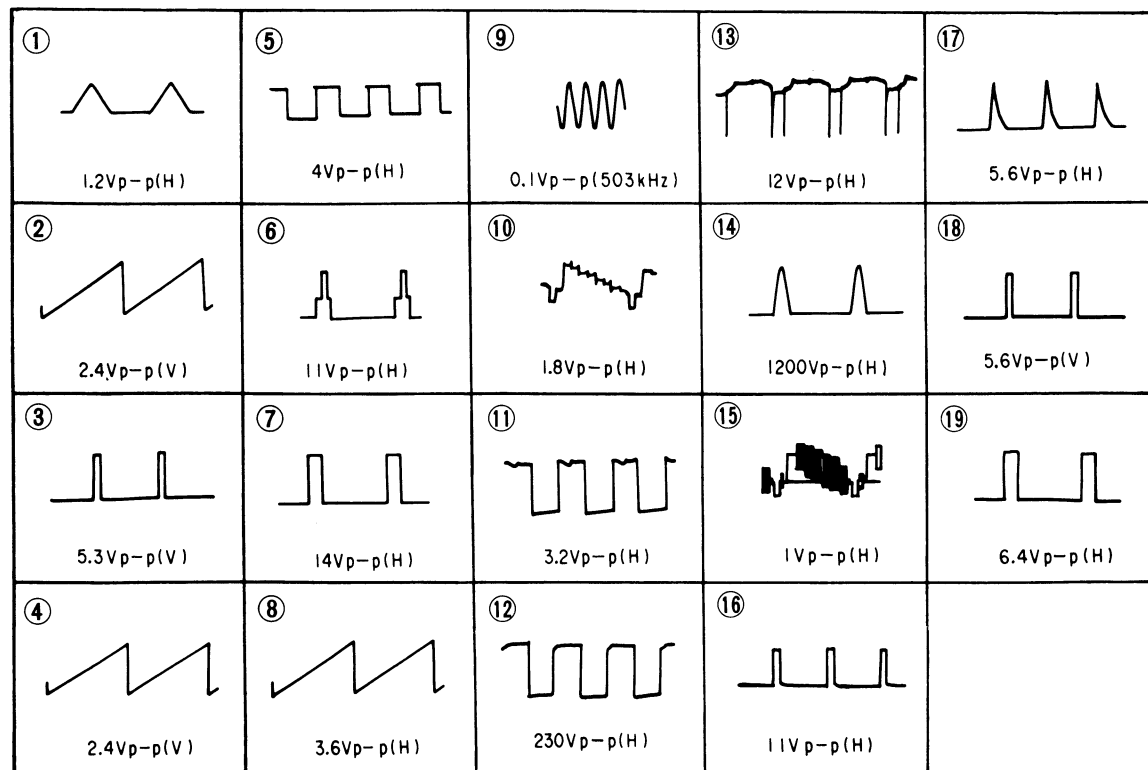
— KS Board —

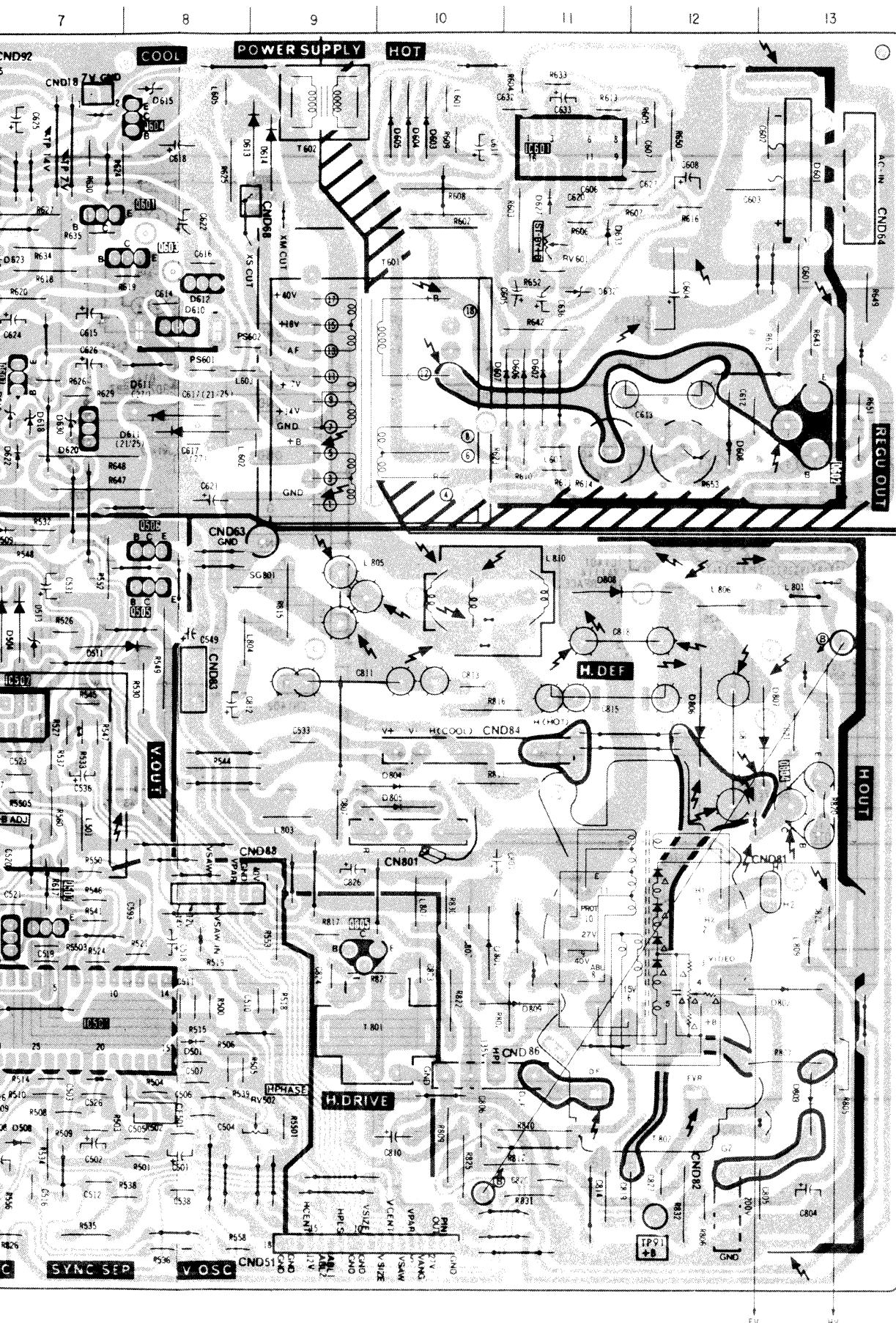


— D Board —



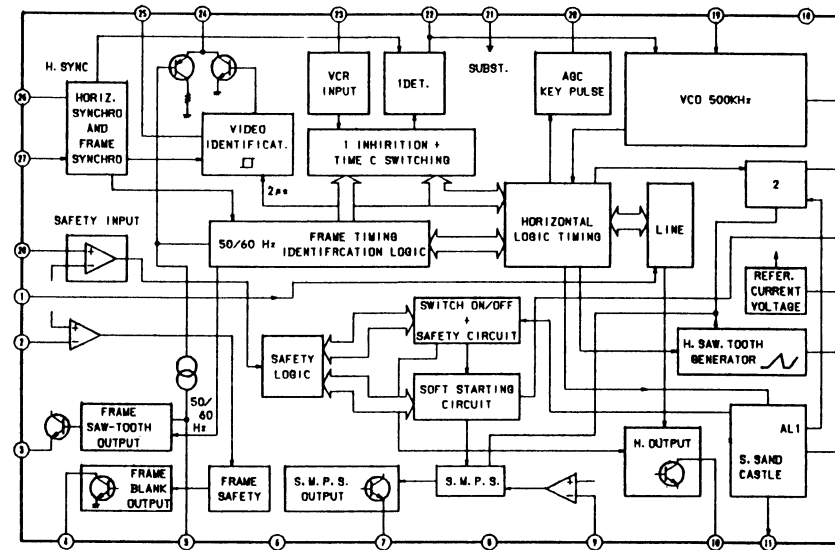
• D BOARD WAVEFORM



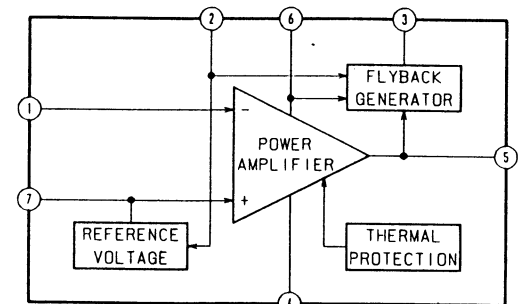


| IC | | DIODE | |
|------------|------|-------------------|------|
| IC001 | D-3 | D001 | E-4 |
| IC002 | B-2 | D002 | E-3 |
| IC003 | E-3 | D003 | E-3 |
| IC004 | F-2 | D004 | D-3 |
| IC251 | E-6 | D005 | B-1 |
| IC401 | J-2 | D007 | D-1 |
| IC501 | H-7 | D008 | F-3 |
| IC502 | F-7 | D009 | I-3 |
| IC601 | B-11 | D011 | E-3 |
| | | D012 | F-2 |
| | | D013 | G-2 |
| TRANSISTOR | | | |
| Q001 | E-2 | D254 | B-5 |
| Q002 | B-1 | D501 | I-8 |
| Q003 | I-2 | D504 | E-7 |
| Q004 | H-2 | D506 | H-7 |
| Q252 | B-6 | D508 | I-7 |
| Q501 | H-6 | D511 | F-8 |
| Q502 | H-7 | D512 | E-7 |
| Q503 | D-4 | D513 | E-7 |
| Q505 | E-8 | D591 | J-2 |
| Q506 | E-8 | D592 | I-2 |
| Q507 | J-6 | D593 | I-2 |
| Q591 | I-3 | D601 | B-13 |
| Q598 | I-3 | D602 | C-11 |
| Q601 | B-8 | D603 | A-10 |
| Q602 | D-13 | D604 | A-10 |
| Q603 | B-8 | D605 | A-10 |
| Q604 | A-8 | D606 | C-11 |
| Q605 | D-6 | D607 | C-11 |
| Q606 | C-6 | D608 | D-11 |
| Q607 | C-7 | D610 | C-8 |
| Q608 | B-6 | D611 | D-8 |
| Q609 | C-6 | D612 | C-8 |
| Q801 | J-6 | D613 | A-9 |
| Q804 | G-13 | D614 | B-9 |
| Q805 | H-10 | D615 | A-8 |
| | | D616 | D-7 |
| | | D617 | B-6 |
| | | D618 | D-7 |
| | | D619 | B-6 |
| | | D620 | D-8 |
| | | D621 | C-6 |
| | | D622 | D-7 |
| | | D623 | C-7 |
| | | D624 | C-7 |
| | | D627 | B-11 |
| | | D630 | D-7 |
| | | D632 | C-11 |
| | | D633 | C-11 |
| | | D801 | H-11 |
| | | D802 | H-13 |
| | | D803 | I-13 |
| | | D804 | G-10 |
| | | D805 | G-10 |
| | | D806 | F-12 |
| | | D808 | E-12 |
| | | D809 | H-11 |
| | | VARIABLE RESISTOR | |
| | | RV501 | G-6 |
| | | RV502 | I-9 |
| | | RV601 | B-11 |

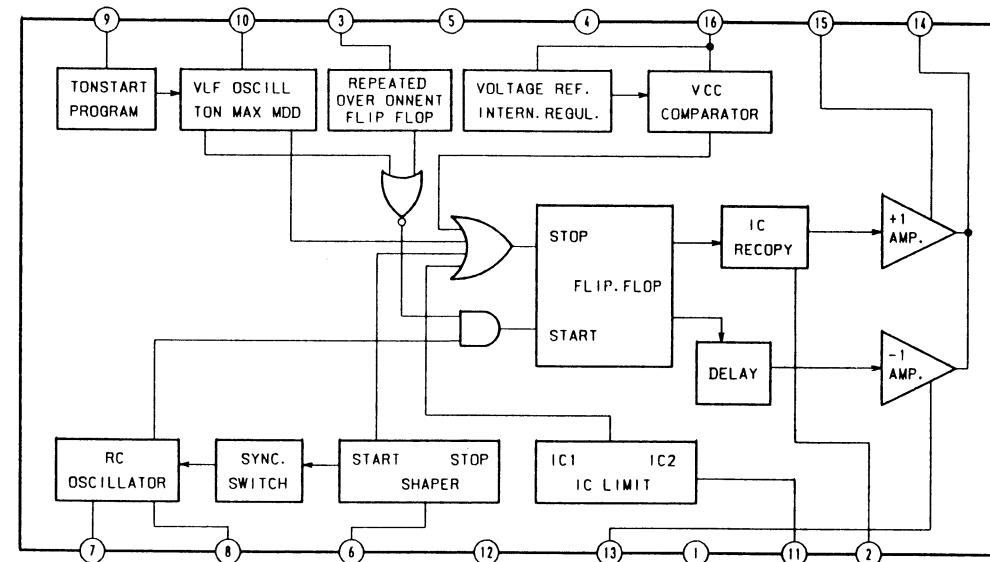
D BOARD IC501 TEA2028A



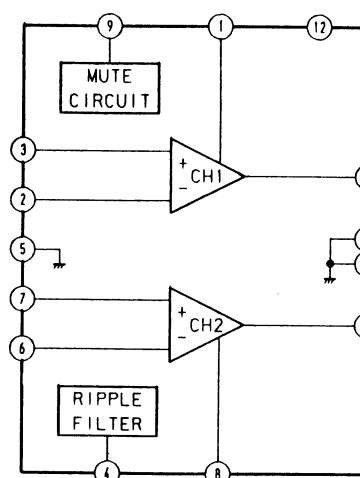
D BOARD IC502 TDA8170

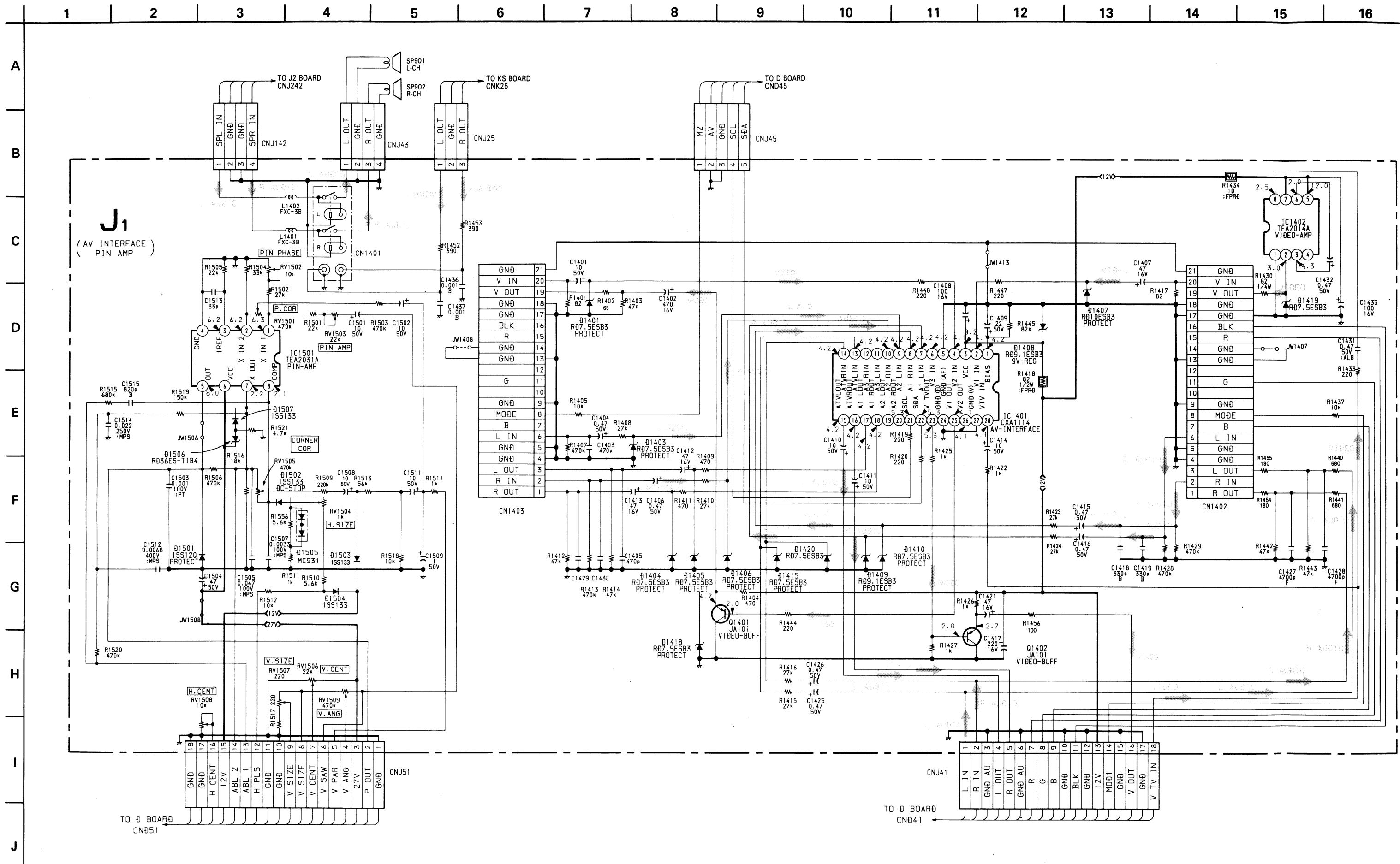


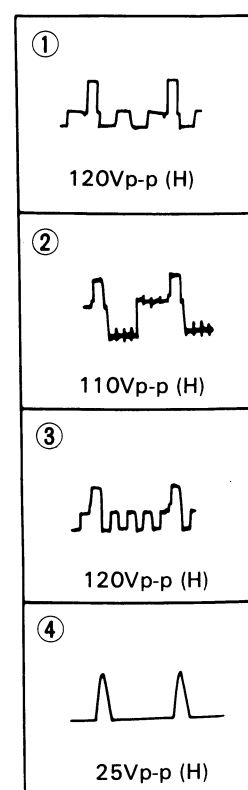
D BOARD IC601 TEA2164



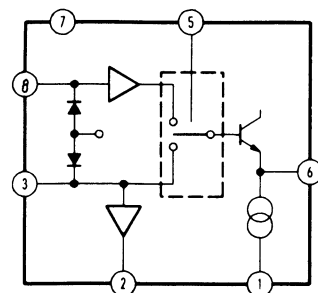
D BOARD IC251 LA4280



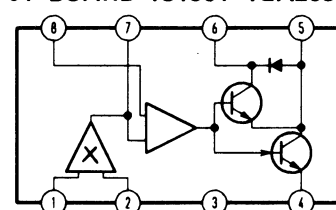


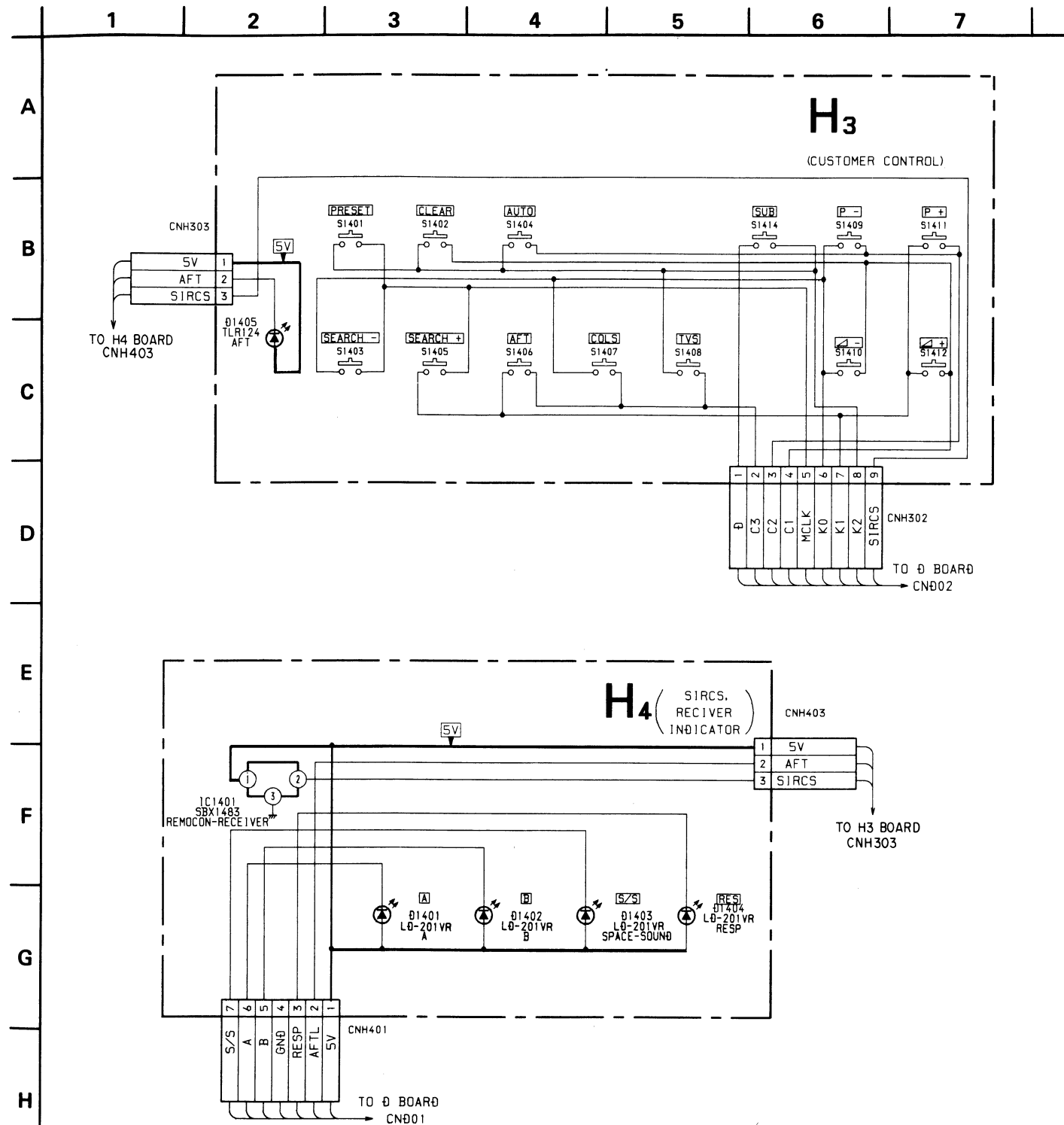


J1 BOARD IC1402 TEA2014A

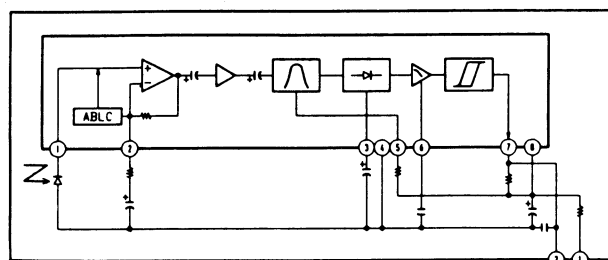


J1 BOARD IC1501 TEA2031A





H4 BOARD IC1401 SBX-1483



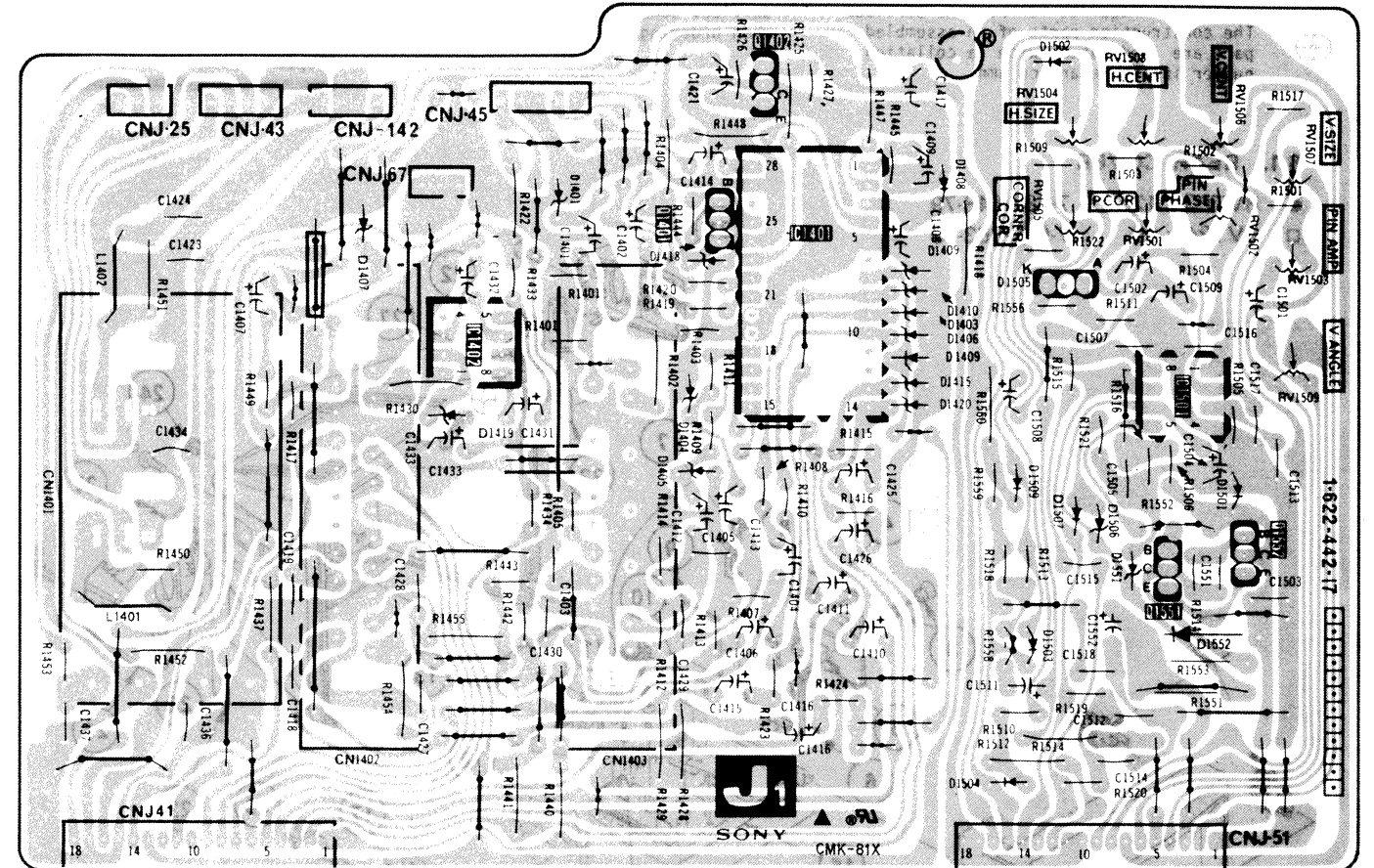
J1

[INTERFACE]

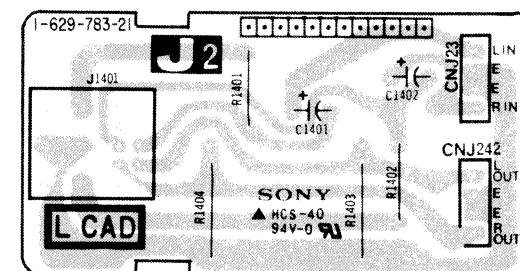
J2

[HEADPHONE JACK]

- J1 Board -

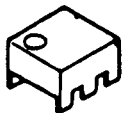


- J2 Board -

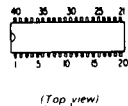


5-5. SEMICONDUCTORS

BX1387
SBX1483



SAA5243E
SDA5241



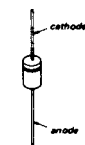
DTA114ES
DTA144ES
DTC114ES
DTC124ES
DTC144ES
2SA1048
2SA1175
2SC403SP
2SC1740SRT
2SC2458
2SC2603
2SC2710



2SB740
2SC1475
2SD789



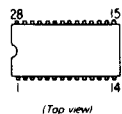
ERC06-15S
ERC25-06S
ERD29-08J



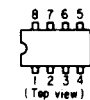
MC921



CXA1114P
MAB8461P
SAA5231-V6
TDA4555
TDA4580
TDA6200
TDA6600
TEA2028B
TMM2063D



TBA129
TEA2014A
TEA2031A



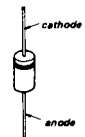
DTC114EK
2SB815B6
2SC2712G



2SB1185
2SD1761



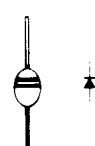
EQB01-11
ERC24-06S
ERD28-06S
ES1F
GP08DPKG23
RGP01-17PKG23
RGP10GPKG23
RGP15GPKG23
1SS168
1SS238
1S1555
10E2



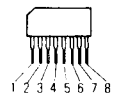
MC931



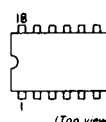
U05G
V19E



CX20061



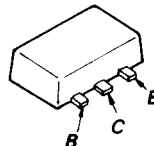
TDA2556
TDA2558



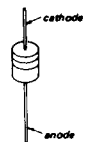
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2SA1091
JA101
JC501



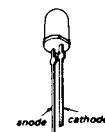
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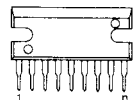
HZS39NB4TD
RD3.6ES-B2
RD3.9ES-B1
RD4.7ES-B1
RD5.6ES-B2
RD6.2ES-B2
RD6.8ES-B2
RD7.5ES-B3
RD9.1ES-B3
RD10ES-B3
RD15ES-B1
RD36ES-B4
RD39ES-B4
1SS119
1SS120
1SS133



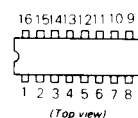
SE303AY



LA4280



TDA3541
TDA4510
TDA8442
TEA2162A
TEA2164



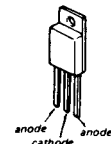
2SA1175
2SC2785



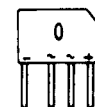
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2SD1941



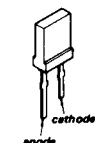
CTU-12S



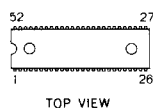
KB04JL



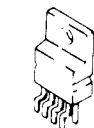
SLP162B



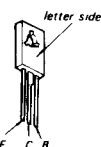
M50436-614SP



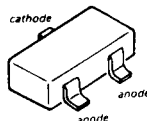
TDA8170



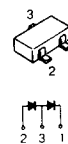
2SA1220A
2SC2611
2SC2688
2SC2690A



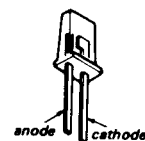
DAN-202K



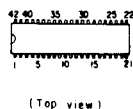
MA3036H
MA3056M
MA3068M
MA3130L



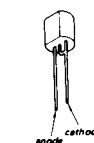
SR632D



MB88503H



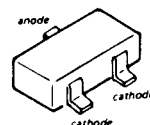
μPC574J



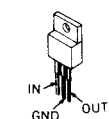
2SB734
2SC2958
2SD773
2SD774



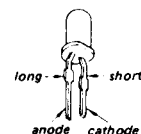
DAP202K



NJM7812B
μPC7812J



TLR124
LD201VR



SECTION 6

EXPLODED VIEWS

NOTE:

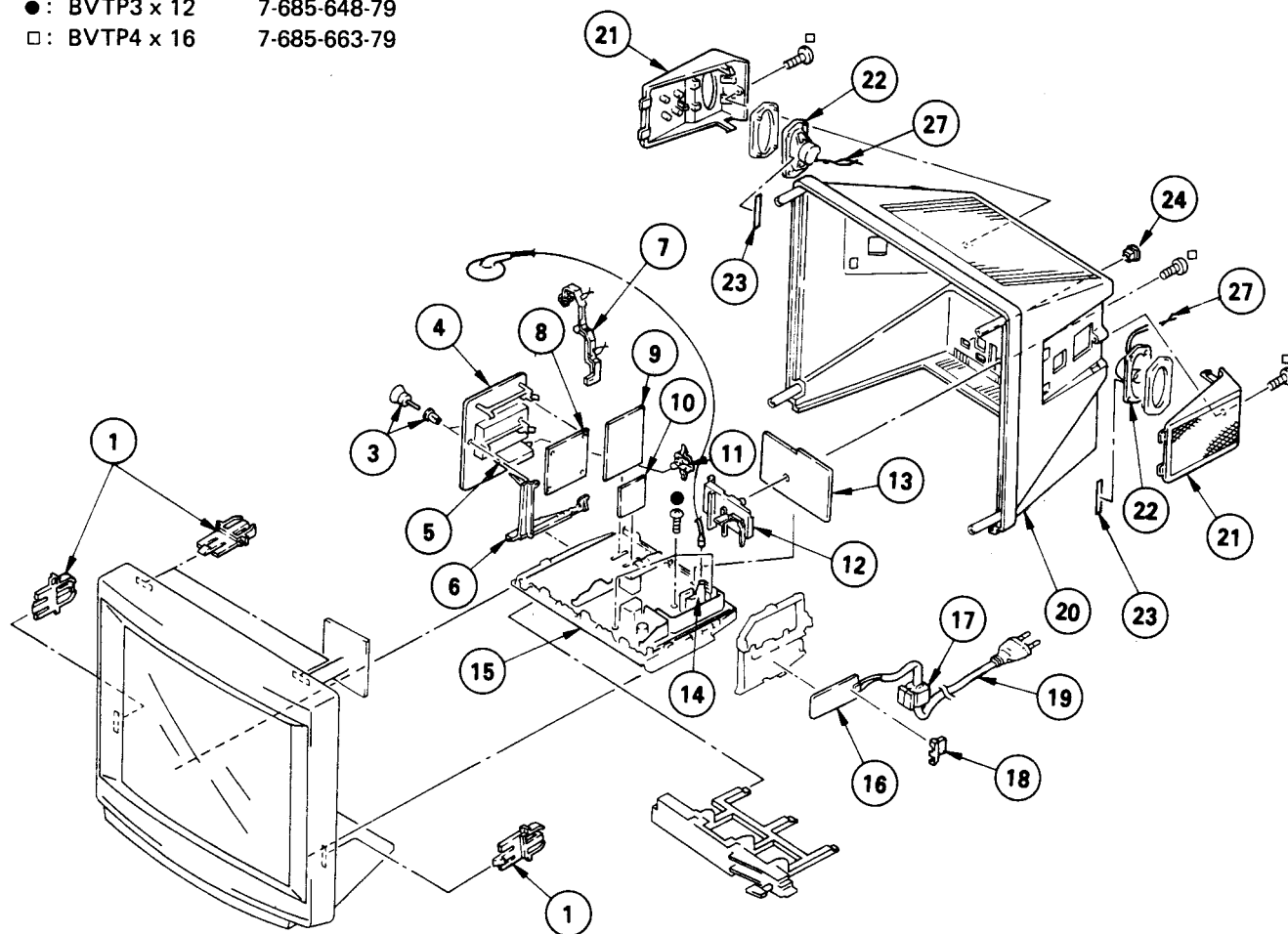
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ▲ are critical for safety.
Replace only with part number specified.

6-1. REAR COVER

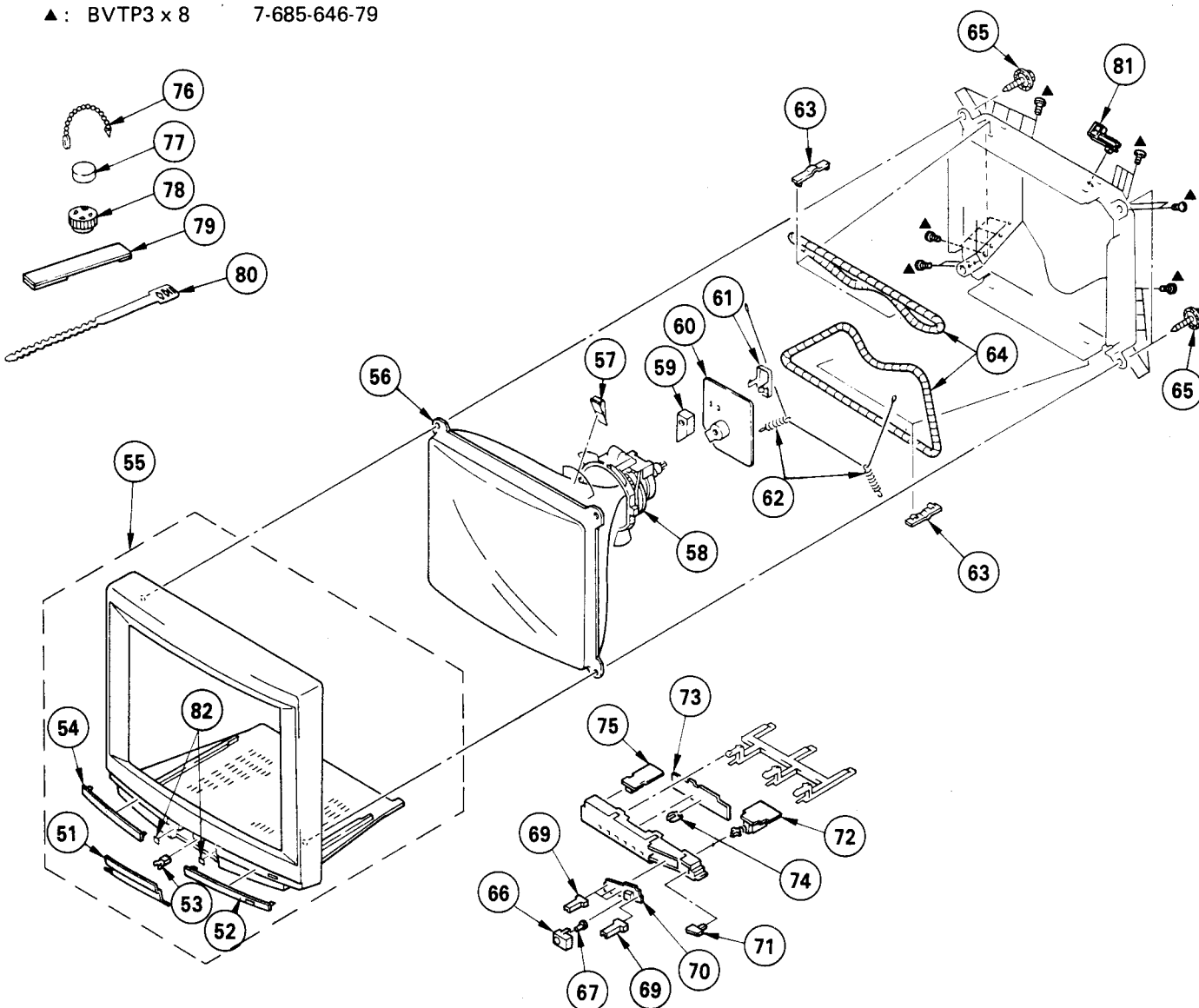
- : BVTP3 x 12 7-685-648-79
□: BVTP4 x 16 7-685-663-79



| REF.NO. | PART NO. | DESCRIPTION | REMARK | REF.NO. | PART NO. | DESCRIPTION | REMARK |
|---------|----------------|---------------------|--------|---------|----------------|------------------------------|--------|
| 1 | 4-382-745-01 | HOLDER, RC | | 13 | ★A-1371-373-A | J1 BOARD, COMPLETE | |
| 3 | 4-386-618-01 | RIVET, T TYPE | | 14 | ▲.1-439-416-11 | TRANSFORMER ASSY, FLYBACK | |
| 4 | ★A-1296-476-A | A BOARD, COMPLETE | | 15 | ★A-1345-720-A | D BOARD, COMPLETE | |
| 5 | ▲.1-465-053-11 | TUNER, ET (UV-615S) | | 16 | ★1-629-719-21 | F1 BOARD | |
| 6 | ★4-386-629-12 | BRACKET, A | | 17 | ▲.4-022-115-01 | HOLDER, AC CODE | |
| 7 | ★4-386-628-11 | SUPPORTER, PC BOARD | | 18 | ★4-386-620-01 | COVER, POWER | |
| 8 | ★A-1347-030-A | V BOARD, COMPLETE | | 19 | ▲.1-559-346-12 | CORD, POWER (WITH CONNECTOR) | |
| 9 | ★A-1135-498-A | B BOARD, COMPLETE | | 20 | 4-387-818-11 | COVER, REAR | |
| 10 | ★1-629-781-21 | KS BOARD | | 21 | X-4385-930-3 | BOARD ASSY, BAFFLE | |
| 11 | ★4-386-617-01 | HOLDER, TERMINAL | | 22 | 1-503-642-41 | SPEAKER | |
| 12 | ★4-386-624-11 | BRACKET, J | | 23 | 4-387-886-01 | SPACER, BAFFLE BOARD | |
| | | | | 24 | 4-389-292-01 | BUSHING, CORD | |
| | | | | 27 | 1-574-565-11 | CORD (WITH PLUG) | |

6-2. PICTURE TUBE

▲: BVTP3 x 8 7-685-646-79



| REF.NO. | PART NO. | DESCRIPTION | REMARK | REF.NO. | PART NO. | DESCRIPTION | REMARK |
|---------|---------------|--------------------------|--------|---------|---------------|--------------------------------------|--------|
| 51 | 4-389-279-01 | DOOR, CONTROL | 51-54 | 66 | *4-388-955-01 | BRACKET (B), LIGHT GUIDE | |
| 52 | 4-392-804-01 | PLATE (C), ORNAMENTAL | | 67 | *4-374-987-01 | GUIDE, LIGHT | |
| 53 | 4-386-710-01 | CATCHER, PUSH | | 69 | *4-387-825-01 | HOLDER, LED | |
| 54 | 4-392-805-01 | PLATE (D), ORNAMENTAL | | 70 | *1-629-786-21 | H4 BOARD | |
| 55 | X-4385-965-1 | BEZNET ASSY | | 71 | 4-389-278-01 | BUTTON, POWER | |
| 56 ▲ | 8-733-224-05 | PICTURE TUBE (A59JWC60X) | | 72 | *1-629-720-21 | F2 BOARD | |
| 57 | 3-703-961-01 | SPACER, DY | | 73 | *1-629-785-21 | H3 BOARD | |
| 58 ▲ | 1-451-311-31 | DEFLECTION YOKE (Y25FXA) | | 74 | *4-384-208-01 | HOLDER, LED | |
| 59 | *4-379-167-01 | COVER (MAIN), CV | | 75 | *1-629-783-21 | J2 BOARD | |
| 60 | *A-1330-849-A | C BOARD, COMPLETE | | 76 | 4-308-870-00 | CLIP, LEAD WIRE | |
| 61 | *4-379-160-01 | COVER (REAR LID), CV | | 77 | 1-452-032-00 | MAGNET, DISK; 10MM ϕ | |
| 62 | 4-303-774-XX | SPRING | | 78 | 1-452-094-00 | MAGNET, ROTATABLE DISK; 150MM ϕ | |
| 63 | *4-385-916-01 | HOLDER (D) | | 79 | X-4387-214-1 | PERMALOY ASSY, CONVERGENCE | |
| 64 ▲ | 1-426-372-11 | COIL, DEMAGNETIZATION | | 80 | 3-701-007-00 | BAND, BINDING | |
| 65 | 4-373-263-01 | SCREW (M), PT | | 81 | *4-387-216-01 | HOLDER, LEAD | |
| | | | | 82 | 4-314-871-00 | CUSHION | |

The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

C

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|--------------|--------------|------------------------|--------|
| D707 | 8-719-911-19 | DIODE 1SS119 | |
| D708 | 8-719-911-19 | DIODE 1SS119 | |
| D709 | 8-719-911-19 | DIODE 1SS119 | |
| D710 | 8-719-911-19 | DIODE 1SS119 | |
| D711 | 8-719-925-06 | DIODE ERC25-06S | |
| D713 | 8-719-911-19 | DIODE 1SS119 | |
| <JACK> | | | |
| J701 | 1-526-798-51 | SOCKET, PICTURE TUBE | |
| <COIL> | | | |
| L704 | 1-410-878-21 | INDUCTOR 33UH | |
| <TRANSISTOR> | | | |
| Q702 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | |
| Q703 | 8-729-326-11 | TRANSISTOR 2SC2611 | |
| Q704 | 8-729-200-17 | TRANSISTOR 2SA1091 | |
| Q705 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | |
| Q706 | 8-729-326-11 | TRANSISTOR 2SC2611 | |
| Q707 | 8-729-200-17 | TRANSISTOR 2SA1091 | |
| Q708 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | |
| Q709 | 8-729-326-11 | TRANSISTOR 2SC2611 | |
| Q710 | 8-729-200-17 | TRANSISTOR 2SA1091 | |
| <RESISTOR> | | | |
| R704 | 1-216-486-00 | METAL OXIDE 8.2K 5% 3W | F |
| R705 | 1-202-824-00 | SOLID 3.3K 10% 1/2W | |
| R706 | 1-249-409-11 | CARBON 220 5% 1/4W | |
| R707 | 1-249-412-11 | CARBON 390 5% 1/4W | |
| R708 | 1-249-401-11 | CARBON 47 5% 1/4W | |
| R709 | 1-202-844-00 | SOLID 330K 10% 1/2W | |
| R710 | 1-215-465-00 | METAL 68K 1% 1/6W | |
| R712 | 1-249-417-11 | CARBON 1K 5% 1/4W | |
| R713 | 1-215-471-00 | METAL 120K 1% 1/6W | |
| R714 | 1-216-486-00 | METAL OXIDE 8.2K 5% 3W | F |
| R715 | 1-202-824-00 | SOLID 3.3K 10% 1/2W | |
| R716 | 1-249-409-11 | CARBON 220 5% 1/4W | |
| R717 | 1-249-415-11 | CARBON 680 5% 1/4W | |
| R718 | 1-202-814-11 | SOLID 33K 10% 1/2W | |
| R719 | 1-249-401-11 | CARBON 47 5% 1/4W | |
| R720 | 1-249-423-11 | CARBON 3.3K 5% 1/4W | |
| R721 | 1-202-842-11 | SOLID 220K 10% 1/2W | |
| R722 | 1-202-848-00 | SOLID 680K 10% 1/2W | |
| R723 | 1-249-417-11 | CARBON 1K 5% 1/4W | |
| R724 | 1-202-846-00 | SOLID 470K 10% 1/2W | |
| R725 | 1-202-838-00 | SOLID 100K 10% 1/2W | |
| R726 | 1-202-824-00 | SOLID 3.3K 10% 1/2W | |
| R727 | 1-249-409-11 | CARBON 220 5% 1/4W | |
| R728 | 1-216-347-11 | METAL OXIDE 0.68 5% 1W | F |
| R729 | 1-249-416-11 | CARBON 820 5% 1/4W | |
| R730 | 1-249-401-11 | CARBON 47 5% 1/4W | |
| R731 | 1-249-423-11 | CARBON 3.3K 5% 1/4W | |
| R732 | 1-249-415-11 | CARBON 680 5% 1/4W | |
| R733 | 1-249-415-11 | CARBON 680 5% 1/4W | |
| R734 | 1-249-405-11 | CARBON 100 5% 1/4W | |
| R735 | 1-215-493-00 | METAL 1M 1% 1/6W | |
| R736 | 1-216-486-00 | METAL OXIDE 8.2K 5% 3W | F |
| R737 | 1-215-491-00 | METAL 820K 1% 1/6W | |
| R739 | 1-249-417-11 | CARBON 1K 5% 1/4W | |



| REF.NO. | PART NO. | DESCRIPTION | REMARK | REF.NO. | PART NO. | DESCRIPTION | REMARK |
|---------------------|-------------------|----------------------------|----------|---------|--------------|--------------|----------|
| <VARIABLE RESISTOR> | | | | C509 | 1-106-220-00 | MYLAR | 0.1MF |
| RV701 | 1-230-641-11 | RES, ADJ, METAL GLAZE 2.2M | | C510 | 1-161-959-00 | CERAMIC | 22PF |
| RV702 | 1-230-619-11 | RES, ADJ, METAL GLAZE 110M | | | | | 10% 100V |
| RV703 | 1-237-749-11 | RES, ADJ, CARBON 2200 | | | | | 10% 500V |
| RV704 | 1-237-749-11 | RES, ADJ, CARBON 2200 | | C511 | 1-108-620-11 | MYLAR | 0.0033MF |
| ***** | | | | C512 | 1-106-220-00 | MYLAR | 0.1MF |
| *A-1345-720-A | D BOARD, COMPLETE | ***** | | C513 | 1-108-614-11 | MYLAR | 0.001MF |
| *4-341-751-01 | EYELET | | | C514 | 1-106-228-00 | MYLAR | 0.22MF |
| *4-341-752-01 | EYELET | | | C515 | 1-124-499-11 | ELECT | 1MF |
| <CAPACITOR> | | | | | | | 10% 50V |
| C001 | 1-102-973-00 | CERAMIC | 100PF | C516 | 1-108-614-11 | MYLAR | 0.001MF |
| C003 | 1-106-220-00 | MYLAR | 0.1MF | C517 | 1-124-252-00 | ELECT | 0.33MF |
| C004 | 1-123-875-11 | ELECT | 10MF | C518 | 1-124-902-00 | ELECT | 0.47MF |
| C005 | 1-102-074-00 | CERAMIC | 0.001MF | C519 | 1-136-173-00 | FILM | 0.47MF |
| C007 | 1-106-383-00 | MYLAR | 0.047MF | C520 | 1-102-121-00 | CERAMIC | 0.0022MF |
| | | | | | | | 10% 50V |
| C008 | 1-101-880-00 | CERAMIC | 47PF | C521 | 1-106-220-00 | MYLAR | 0.1MF |
| C009 | 1-101-884-00 | CERAMIC | 56PF | C522 | 1-124-122-11 | ELECT | 100MF |
| C010 | 1-124-122-11 | ELECT | 100MF | C523 | 1-108-614-11 | MYLAR | 0.001MF |
| C011 | 1-101-004-00 | CERAMIC | 0.01MF | C524 | 1-108-798-11 | MYLAR | 0.0033MF |
| C012 | 1-124-122-11 | ELECT | 100MF | C525 | 1-102-973-00 | CERAMIC | 100PF |
| | | | | | | | 5% 50V |
| C013 | 1-101-004-00 | CERAMIC | 0.01MF | C526 | 1-102-951-00 | CERAMIC | 15PF |
| C014 | 1-124-463-00 | ELECT | 0.1MF | C527 | 1-106-220-00 | MYLAR | 0.1MF |
| C015 | 1-124-910-11 | ELECT | 47MF | C531 | 1-124-190-00 | ELECT | 680MF |
| C016 | 1-101-004-00 | CERAMIC | 0.01MF | C532 | 1-124-122-11 | ELECT | 100MF |
| C017 | 1-123-875-11 | ELECT | 10MF | C533 | 1-106-216-00 | MYLAR | 0.068MF |
| | | | | | | | 10% 100V |
| C018 | 1-102-980-00 | CERAMIC | 270PF | C534 | 1-124-120-11 | ELECT | 220MF |
| C019 | 1-106-383-00 | MYLAR | 0.047MF | C536 | 1-131-365-00 | TANTALUM | 10MF |
| C020 | 1-102-973-00 | CERAMIC | 100PF | C537 | 1-124-499-11 | ELECT | 1MF |
| C021 | 1-102-973-00 | CERAMIC | 100PF | C538 | 1-108-614-11 | MYLAR | 0.001MF |
| C022 | 1-124-910-11 | ELECT | 47MF | C539 | 1-102-820-00 | CERAMIC | 330PF |
| | | | | | | | 5% 50V |
| C023 | 1-124-499-11 | ELECT | 1MF | C591 | 1-123-875-11 | ELECT | 10MF |
| C024 | 1-124-499-11 | ELECT | 1MF | C592 | 1-124-910-11 | ELECT | 47MF |
| C025 | 1-102-125-00 | CERAMIC | 0.0047MF | C593 | 1-102-820-00 | CERAMIC | 330PF |
| C026 | 1-102-125-00 | CERAMIC | 0.0047MF | C601 | 1-162-599-12 | CERAMIC | 0.0047MF |
| C027 | 1-106-220-00 | MYLAR | 0.1MF | C602 | 1-162-599-12 | CERAMIC | 0.0047MF |
| | | | | | | | 250V |
| C028 | 1-101-361-00 | CERAMIC | 150PF | | | | 250V |
| C029 | 1-102-121-00 | CERAMIC | 0.0022MF | C603 | 1-162-599-12 | CERAMIC | 0.0047MF |
| C251 | 1-124-927-11 | ELECT | 4.7MF | C604 | 1-125-318-00 | ELECT(BLOCK) | 220MF |
| C252 | 1-124-927-11 | ELECT | 4.7MF | C605 | 1-124-122-11 | ELECT | 100MF |
| C253 | 1-124-122-11 | ELECT | 100MF | C606 | 1-106-220-00 | MYLAR | 0.1MF |
| | | | | C607 | 1-130-019-00 | FILM | 0.0012MF |
| C254 | 1-124-927-11 | ELECT | 4.7MF | | | | 5% 50V |
| C255 | 1-124-927-11 | ELECT | 4.7MF | C608 | 1-123-875-11 | ELECT | 10MF |
| C256 | 1-106-220-00 | MYLAR | 0.1MF | C611 | 1-124-122-11 | ELECT | 100MF |
| C257 | 1-101-004-00 | CERAMIC | 0.01MF | C612 | 1-162-115-00 | CERAMIC | 330PF |
| C258 | 1-106-220-00 | MYLAR | 0.1MF | C613 | 1-136-539-11 | FILM | 0.0022MF |
| | | | | C614 | 1-102-030-00 | CERAMIC | 330PF |
| C260 | 1-106-220-00 | MYLAR | 0.1MF | | | | 10% 500V |
| C265 | 1-102-074-00 | CERAMIC | 0.001MF | C615 | 1-124-557-11 | ELECT | 1000MF |
| C266 | 1-102-074-00 | CERAMIC | 0.001MF | C616 | 1-102-030-00 | CERAMIC | 330PF |
| C401 | 1-124-910-11 | ELECT | 47MF | C618 | 1-124-637-11 | ELECT | 1000MF |
| C403 | 1-124-910-11 | ELECT | 47MF | C619 | 1-124-556-11 | ELECT | 2200MF |
| | | | | C620 | 1-102-074-00 | CERAMIC | 0.001MF |
| C501 | 1-124-927-11 | ELECT | 4.7MF | | | | 10% 50V |
| C502 | 1-124-927-11 | ELECT | 4.7MF | C621 | 1-124-347-00 | ELECT | 100MF |
| C503 | 1-106-371-00 | MYLAR | 0.015MF | C622 | 1-124-556-11 | ELECT | 2200MF |
| C504 | 1-101-361-00 | CERAMIC | 150PF | C623 | 1-124-910-11 | ELECT | 47MF |
| C505 | 1-108-794-11 | MYLAR | 0.0015MF | C624 | 1-124-122-11 | ELECT | 100MF |
| | | | | C625 | 1-124-360-00 | ELECT | 1000MF |
| C506 | 1-106-375-12 | MYLAR | 0.022MF | | | | 20% 16V |
| C507 | 1-130-783-00 | MYLAR | 0.33MF | C626 | 1-123-875-11 | ELECT | 10MF |
| C508 | 1-106-375-12 | MYLAR | 0.022MF | C627 | 1-102-074-00 | CERAMIC | 0.001MF |
| | | | | C631 | 1-123-875-11 | ELECT | 10MF |
| | | | | C632 | 1-102-074-00 | CERAMIC | 0.001MF |
| | | | | C633 | 1-124-927-11 | ELECT | 4.7MF |
| | | | | | | | 20% 50V |
| | | | | C636 | 1-123-382-00 | ELECT | 3.3MF |
| | | | | C801 | 1-126-105-11 | ELECT | 1000MF |
| | | | | C802 | 1-102-030-00 | CERAMIC | 330PF |
| | | | | C804 | 1-123-948-00 | ELECT | 22MF |
| | | | | C805 | 1-162-114-00 | CERAMIC | 0.0047MF |
| | | | | | | | 20% 2KV |
| | | | | C806 | 1-106-220-00 | MYLAR | 0.1MF |
| | | | | | | | 10% 100V |

The components identified by shading and mark Δ are critical for safety.
Replace only with part number specified.

D

| REF.NO. | PART NO. | DESCRIPTION | REMARK | REF.NO. | PART NO. | DESCRIPTION | REMARK |
|---------------|---------------|-------------------------------|--------|---------------|-------------------|-----------------------|--------|
| C807 | 1-106-395-00 | MYLAR 0.15MF 10% | 200V | D508 | 8-719-911-19 | DIODE 1SS119 | |
| C810 | 1-124-494-00 | ELECT 33MF | 160V | D509 | 8-719-911-19 | DIODE 1SS119 | |
| C811 | 1-136-113-00 | FILM 2MF | 200V | D511 | 8-719-911-55 | DIODE U05G | |
| C812 | 1-124-634-11 | ELECT 1MF | 250V | D512 | 8-719-911-55 | DIODE U05G | |
| C813 | 1-102-212-00 | CERAMIC 820PF | 500V | D513 | 8-719-109-81 | DIODE RD4.7ES-B2 | |
| C814 | 1-161-754-00 | CERAMIC 0.001MF | 2KV | D591 | 8-719-911-19 | DIODE 1SS119 | |
| C815 | 1-136-111-00 | FILM 1MF | 200V | D592 | 8-719-911-19 | DIODE 1SS119 | |
| C817 | 1-136-565-11 | FILM 0.015MF | 1.4KV | D593 | 8-719-911-19 | DIODE 1SS119 | |
| C818 | 1-136-759-11 | FILM 0.039MF | 630V | D601 | 8-719-946-90 | DIODE KBU4JL-6088 | |
| C819 Δ | 1-161-731-11 | CERAMIC 0.001MF | 2KV | D602 | 8-719-925-06 | DIODE ERC25-06S | |
| C820 | 1-106-218-00 | MYLAR 0.0082MF | 400V | D603 | 8-719-911-55 | DIODE U05G | |
| C821 Δ | 1-162-116-51 | CERAMIC 680PF | 2KV | D604 | 8-719-911-55 | DIODE U05G | |
| C822 | 1-102-114-00 | CERAMIC 470PF | 50V | D605 | 8-719-911-55 | DIODE U05G | |
| C823 | 1-106-359-00 | MYLAR 0.0047MF | 400V | D606 | 8-719-925-06 | DIODE ERC25-06S | |
| C824 | 1-102-212-00 | CERAMIC 820PF | 500V | D607 | 8-719-925-06 | DIODE ERC25-06S | |
| C825 | 1-106-375-12 | MYLAR 0.022MF | 250V | D608 | 8-719-925-06 | DIODE ERC25-06S | |
| C826 | 1-123-875-11 | ELECT 10MF | 50V | D610 | 8-719-300-59 | DIODE CTU-12S | |
| <FILTER> | | | | D611 | 8-719-928-08 | DIODE ERD28-06S | |
| CF001 | 1-567-686-11 | OSCILLATOR, CERAMIC | | D612 | 8-719-300-59 | DIODE CTU-12S | |
| CF501 | 1-567-888-11 | OSCILLATOR, CERAMIC | | D613 | 8-719-925-06 | DIODE ERC25-06S | |
| <CONNECTOR> | | | | D614 | 8-719-925-06 | DIODE ERC25-06S | |
| CN801 | *1-508-765-00 | PIN, CONNECTOR (5MM PITCH) 3P | | D615 | 8-719-109-90 | DIODE RD5.6ES-B3 | |
| CND01 | *1-564-884-11 | PLUG, CONNECTOR 7P | | D616 | 8-719-109-93 | DIODE RD6.2ES-B2 | |
| CND02 | *1-564-886-11 | PLUG, CONNECTOR 9P | | D618 | 8-719-109-89 | DIODE RD5.6ES-B2 | |
| CND11 | *1-566-660-11 | CONNECTOR, HINGE (PLUG) 18P | | D620 | 8-719-000-12 | DIODE MC931 | |
| CND12 | *1-564-884-11 | PLUG, CONNECTOR 7P | | D622 | 8-719-911-19 | DIODE 1SS119 | |
| CND18 | *1-560-290-00 | PLUG, CONNECTOR (2.5MM PITCH) | | D623 | 8-719-911-19 | DIODE 1SS119 | |
| CND19 | *1-564-881-11 | PLUG, CONNECTOR 4P | | D624 | 8-719-911-19 | DIODE 1SS119 | |
| CND21 | *1-564-346-00 | CONNECTOR, BOARD TO BOARD 18P | | D627 | 8-719-911-19 | DIODE 1SS119 | |
| CND23 | *1-560-124-00 | PLUG, CONNECTOR (2.5MM PITCH) | | D630 | 8-719-110-39 | DIODE RD15ES-B1 | |
| CND31 | *1-564-346-00 | CONNECTOR, BOARD TO BOARD 18P | | D632 | 8-719-110-16 | DIODE RD10ES-B1 | |
| CND41 | *1-566-367-11 | CONNECTOR, HINGE (RECEPTACLE) | | D633 | 8-719-911-19 | DIODE 1SS119 | |
| CND45 | *1-564-882-11 | PLUG, CONNECTOR 5P | | D801 | 8-719-925-06 | DIODE ERC25-06S | |
| CND51 | *1-566-367-11 | CONNECTOR, HINGE (RECEPTACLE) | | D802 | 8-719-925-06 | DIODE ERC25-06S | |
| CND64 | *1-506-348-XX | PIN, CONNECTOR 3P | | D803 | 8-719-300-65 | DIODE ES1F | |
| CND68 | *1-564-879-11 | PLUG, CONNECTOR 2P | | D804 | 8-719-911-55 | DIODE U05G | |
| CND82 | *1-508-765-00 | PIN, CONNECTOR (5MM PITCH) 3P | | D805 | 8-719-911-55 | DIODE U05G | |
| CND83 | *1-508-786-00 | PIN, CONNECTOR (5MM PITCH) 2P | | D806 | 8-719-945-80 | DIODE ERC06-15S | |
| CND84 | *1-564-038-00 | CONNECTOR PLUG, DY (MINI) 6P | | D807 | 8-719-945-80 | DIODE ERC06-15S | |
| CND91 | *1-560-123-00 | PLUG, CONNECTOR (2.5MM) 3P | | D808 | 8-719-928-08 | DIODE ERD28-08S | |
| CND92 | *1-560-125-00 | PLUG, CONNECTOR (2.5MM) 5P | | D809 | 8-719-925-06 | DIODE ERC25-06S | |
| CND94 | *1-560-123-00 | PLUG, CONNECTOR (2.5MM PITCH) | | <IC> | | | |
| <DIODE> | | | | IC001 | 8-759-630-06 | IC M50436-614SP | |
| D001 | 8-719-911-19 | DIODE 1SS119 | | IC002 | 8-759-979-57 | IC MB88503H-1022G | |
| D002 | 8-719-911-19 | DIODE 1SS119 | | IC003 | 8-759-603-41 | IC M58655P | |
| D003 | 8-719-911-19 | DIODE 1SS119 | | IC004 | 8-759-157-40 | IC UPC574J | |
| D004 | 8-719-911-19 | DIODE 1SS119 | | IC251 | 8-759-803-31 | IC LA4280 | |
| D005 | 8-719-109-71 | DIODE RD3.9ES-B1 | | *4-368-683-01 | SPRING; IC251 | | |
| D007 | 8-719-109-89 | DIODE RD5.6ES-B2 | | IC401 | 8-752-006-12 | IC CX20061 | |
| D008 | 8-719-110-85 | DIODE RD36ES-B4 | | IC501 | 8-759-970-73 | IC TEA2028B | |
| D009 | 8-719-109-89 | DIODE RD5.6ES-B2 | | IC502 | 8-759-944-57 | IC TDA8170 | |
| D011 | 8-719-911-19 | DIODE 1SS119 | | *4-381-724-01 | HOLDER, IC; IC502 | | |
| D012 | 8-719-911-19 | DIODE 1SS119 | | IC601 | 8-759-946-23 | IC TEA2164 | |
| D013 | 8-719-911-19 | DIODE 1SS119 | | IC608 | 8-759-700-06 | IC UPC7812H | |
| D254 | 8-719-110-14 | DIODE RD9.1ES-B3 | | <COIL> | | | |
| D501 | 8-719-911-19 | DIODE 1SS119 | | L001 | 1-408-414-00 | INDUCTOR 27UH | |
| D504 | 8-719-911-55 | DIODE U05G | | L501 | 1-408-225-00 | INDUCTOR 3.3UH | |
| D506 | 8-719-000-12 | DIODE MC931 | | L601 | *1-420-872-00 | COIL, AIR CORE | |
| | | | | L602 | 1-410-396-41 | FERRITE BEAD INDUCTOR | |

D


The components identified by shading and mark Δ are critical for safety.
Replace only with part number specified.

| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|--------------|---------------|--------------------------|-------------|----------|--------------|-------------|--------------|
| L603 | 1-410-396-41 | FERRITE BEAD INDUCTOR | | R017 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| L605 | 1-459-442-00 | COIL (WITH CORE) | | R018 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| L606 | 1-421-013-00 | COIL, (HORIZONTAL CHOKE) | 25UH | R019 | 1-249-433-11 | CARBON | 22K 5% 1/4W |
| L607 | 1-408-421-00 | INDUCTOR 100UH | | R020 | 1-249-433-11 | CARBON | 22K 5% 1/4W |
| L803 | 1-459-104-00 | COIL, DUST CORE | | R021 | 1-249-433-11 | CARBON | 22K 5% 1/4W |
| L804 | 1-408-239-00 | INDUCTOR 4.7MMH | | R022 | 1-249-433-11 | CARBON | 22K 5% 1/4W |
| L805 | 1-459-652-12 | HLC | | R023 | 1-249-429-11 | CARBON | 10K 5% 1/4W |
| L806 | 1-459-115-00 | COIL, DCC-H | | R024 | 1-249-429-11 | CARBON | 10K 5% 1/4W |
| L807 | 1-407-504-00 | INDUCTOR 10MMH | | R025 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| L809 | *1-420-872-00 | COIL, AIR CORE | | R026 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| L810 | 1-459-390-00 | COIL (WITH CORE) | | R027 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| <IC LINK> | | | | R028 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| PS601A | 1-532-984-91 | LINK, IC 2A | | R029 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| PS602A | 1-532-675-91 | LINK, IC 1.5A | | R030 | 1-249-425-11 | CARBON | 4.7K 5% 1/4W |
| <TRANSISTOR> | | | | R031 | 1-249-429-11 | CARBON | 10K 5% 1/4W |
| Q001 | 8-729-600-24 | TRANSISTOR 2SC403SP-51 | | R032 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| Q002 | 8-729-173-38 | TRANSISTOR 2SA733-K | | R033 | 1-249-413-11 | CARBON | 470 5% 1/4W |
| Q003 | 8-729-173-38 | TRANSISTOR 2SA733-K | | R034 | 1-249-413-11 | CARBON | 470 5% 1/4W |
| Q004 | 8-729-173-38 | TRANSISTOR 2SA733-K | | R035 | 1-249-431-11 | CARBON | 15K 5% 1/4W |
| Q252 | 8-729-900-36 | TRANSISTOR DTC124ES | | R036 | 1-249-421-11 | CARBON | 2.2K 5% 1/4W |
| Q501 | 8-729-173-38 | TRANSISTOR 2SA733-K | | R037 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| Q502 | 8-729-173-38 | TRANSISTOR 2SA733-K | | R038 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| Q503 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | R039 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| Q505 | 8-729-114-96 | TRANSISTOR 2SD774-34 | | R040 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| Q506 | 8-729-140-97 | TRANSISTOR 2SB734-34 | | R041 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| Q507 | 8-729-173-38 | TRANSISTOR 2SA733-K | | R042 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| Q591 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | R043 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| Q598 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | R044 | 1-249-429-11 | CARBON | 10K 5% 1/4W |
| Q601 | 8-729-122-03 | TRANSISTOR 2SA1220A-Q | | R045 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| Q602 | 8-729-209-02 | TRANSISTOR 2SD1548-LB | | R046 | 1-249-429-11 | CARBON | 10K 5% 1/4W |
| Q603 | *4-368-683-01 | SPRING; Q602 | | R047 | 1-249-409-11 | CARBON | 220 5% 1/4W |
| Q604 | 8-729-820-15 | TRANSISTOR 2SB1185-E | | R048 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| Q604 | 8-729-308-92 | TRANSISTOR 2SD789-03C | | R049 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| Q605 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | R050 | 1-249-433-11 | CARBON | 22K 5% 1/4W |
| Q606 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | R051 | 1-249-429-11 | CARBON | 10K 5% 1/4W |
| Q607 | 8-729-920-92 | TRANSISTOR 2SD2096-EF | | R052 | 1-249-439-11 | CARBON | 68K 5% 1/4W |
| Q608 | *4-368-683-01 | SPRING | | R053 | 1-249-437-11 | CARBON | 47K 5% 1/4W |
| Q609 | 8-729-308-92 | TRANSISTOR 2SD789-03C | | R054 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| Q801 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | R056 | 1-249-440-11 | CARBON | 82K 5% 1/4W |
| Q804 | 8-729-304-50 | TRANSISTOR 2SD1941-06 | | R057 | 1-249-409-11 | CARBON | 220 5% 1/4W |
| Q805 | *4-368-683-01 | SPRING; Q804 | | R058 | 1-249-409-11 | CARBON | 220 5% 1/4W |
| | 8-729-119-80 | TRANSISTOR 2SC2688-LK | | R059 | 1-249-435-11 | CARBON | 33K 5% 1/4W |
| <RESISTOR> | | | | R060 | 1-249-436-11 | CARBON | 39K 5% 1/4W |
| R001 | 1-249-417-11 | CARBON | 1K 5% 1/4W | R061 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| R002 | 1-249-417-11 | CARBON | 1K 5% 1/4W | R062 | 1-249-411-11 | CARBON | 330 5% 1/4W |
| R003 | 1-249-417-11 | CARBON | 1K 5% 1/4W | R063 | 1-249-431-11 | CARBON | 15K 5% 1/4W |
| R004 | 1-249-417-11 | CARBON | 1K 5% 1/4W | R064 | 1-249-429-11 | CARBON | 10K 5% 1/4W |
| R005 | 1-249-407-11 | CARBON | 150 5% 1/4W | R067 | 1-249-413-11 | CARBON | 470 5% 1/4W |
| R006 | 1-249-417-11 | CARBON | 1K 5% 1/4W | R068 | 1-249-421-11 | CARBON | 2.2K 5% 1/4W |
| R007 | 1-249-405-11 | CARBON | 100 5% 1/4W | R069 | 1-249-423-11 | CARBON | 3.3K 5% 1/4W |
| R008 | 1-249-417-11 | CARBON | 1K 5% 1/4W | R070 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| R009 | 1-249-417-11 | CARBON | 1K 5% 1/4W | R071 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| R010 | 1-249-413-11 | CARBON | 470 5% 1/4W | R072 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| R011 | 1-249-417-11 | CARBON | 1K 5% 1/4W | R073 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| R012 | 1-249-417-11 | CARBON | 1K 5% 1/4W | R074 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| R013 | 1-249-417-11 | CARBON | 1K 5% 1/4W | R075 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| R014 | 1-249-417-11 | CARBON | 1K 5% 1/4W | R077 | 1-249-413-11 | CARBON | 470 5% 1/4W |
| R016 | 1-249-429-11 | CARBON | 10K 5% 1/4W | R078 | 1-249-423-11 | CARBON | 3.3K 5% 1/4W |
| | | | | R079 | 1-249-435-11 | CARBON | 33K 5% 1/4W |
| | | | | R080 | 1-249-429-11 | CARBON | 10K 5% 1/4W |
| | | | | R081 | 1-249-441-11 | CARBON | 100K 5% 1/4W |
| | | | | R082 | 1-249-409-11 | CARBON | 220 5% 1/4W |
| | | | | R083 | 1-249-429-11 | CARBON | 10K 5% 1/4W |

| REF.NO. | PART NO. | DESCRIPTION | | | | REMARK | REF.NO. | PART NO. | DESCRIPTION | | | | REMARK |
|---------|--------------|-------------|------|----|------|--------|---------|--------------|-------------|------|-----|------|--------|
| R084 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W | | R535 | 1-249-749-00 | CARBON | 4.2M | 5% | 1/4W | |
| R085 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | | R536 | 1-249-749-00 | CARBON | 2.2M | 5% | 1/4W | |
| R086 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | | R537 | 1-249-434-11 | CARBON | 27K | 5% | 1/4W | |
| R087 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | | R538 | 1-247-883-00 | CARBON | 150K | 5% | 1/4W | |
| R088 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | | R539 | 1-247-883-00 | CARBON | 150K | 5% | 1/4W | |
| R090 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W | | R540 | 1-249-399-11 | CARBON | 33 | 5% | 1/4W | |
| R091 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W | | R541 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W | |
| R093 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | | R542 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R094 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | | R543 | 1-249-451-11 | CARBON | 2.2 | 5% | 1/4W | |
| R095 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W | | R544 | 1-247-745-11 | CARBON | 330 | 5% | 1/2W | |
| R096 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W | | R545 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W | |
| R097 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | | R546 | 1-249-434-11 | CARBON | 27K | 5% | 1/4W | |
| R098 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | | R547 | 1-249-423-11 | CARBON | 3.3K | 5% | 1/4W | |
| R099 | 1-215-900-11 | METAL OXIDE | 22K | 5% | 2W | F | R548 | 1-216-349-11 | METAL OXIDE | 1 | 5% | 1W | F |
| R251 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | | R549 | 1-216-454-11 | METAL OXIDE | 390 | 5% | 2W | F |
| R252 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W | | R550 | 1-249-440-11 | CARBON | 82K | 5% | 1/4W | |
| R253 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W | | R551 | 1-249-749-00 | CARBON | 2.2M | 5% | 1/4W | |
| R255 | 1-249-385-11 | CARBON | 2.2 | 5% | 1/4W | F | R553 | 1-216-869-11 | METAL OXIDE | 1K | 5% | 1W | |
| R256 | 1-249-385-11 | CARBON | 2.2 | 5% | 1/4W | F | R554 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W | |
| R260 | 1-249-393-11 | CARBON | 10 | 5% | 1/4W | | R555 | 1-249-749-00 | CARBON | 2.2M | 5% | 1/4W | |
| R261 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | | R556 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W | |
| R262 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W | | R557 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R263 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W | | R558 | 1-247-895-00 | CARBON | 470K | 5% | 1/4W | |
| R264 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W | | R559 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W | |
| R265 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | | R560 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W | |
| R266 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | | R591 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W | |
| R401 | 1-249-434-11 | CARBON | 27K | 5% | 1/4W | | R592 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R402 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W | | R593 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R410 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W | | R594 | 1-249-424-11 | CARBON | 3.9K | 5% | 1/4W | |
| R411 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W | | R595 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R412 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W | | R596 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R500 | 1-247-897-11 | CARBON | 560K | 5% | 1/4W | | R597 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R501 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W | | R598 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W | |
| R502 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W | | R599 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W | |
| R503 | 1-249-410-11 | CARBON | 270 | 5% | 1/4W | | R602 | 1-215-901-00 | METAL OXIDE | 33K | 5% | 2W | F |
| R504 | 1-215-427-00 | METAL | 1.8K | 1% | 1/6W | | R603 | 1-216-359-00 | METAL OXIDE | 6.8 | 5% | 1W | F |
| R505 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W | | R604 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W | |
| R506 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W | | R605 | 1-215-469-00 | METAL | 100K | 1% | 1/6W | |
| R507 | 1-247-891-00 | CARBON | 330K | 5% | 1/4W | | R606 | 1-249-426-11 | CARBON | 5.6K | 5% | 1/4W | |
| R509 | 1-249-424-11 | CARBON | 3.9K | 5% | 1/4W | | R607 | 1-249-434-11 | CARBON | 27K | 5% | 1/4W | |
| R510 | 1-249-426-11 | CARBON | 5.6K | 5% | 1/4W | | R608 | 1-215-901-00 | METAL OXIDE | 33K | 5% | 2W | F |
| R511 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | | R609 | 1-249-401-11 | CARBON | 47 | 5% | 1/4W | |
| R512 | 1-247-891-00 | CARBON | 330K | 5% | 1/4W | | R610 | 1-249-393-11 | CARBON | 10 | 5% | 1/4W | F |
| R513 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | | R611 | 1-249-385-11 | CARBON | 2.2 | 5% | 1/4W | F |
| R514 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W | | R612 | 1-207-905-00 | WIREWOUND | 0.27 | 10% | 2W | F |
| R515 | 1-249-423-11 | CARBON | 3.3K | 5% | 1/4W | | R613 | 1-249-401-11 | CARBON | 47 | 5% | 1/4W | |
| R516 | 1-249-408-11 | CARBON | 180 | 5% | 1/4W | | R614 | 1-205-919-11 | WIREWOUND | 220 | 10% | 10W | F |
| R517 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | | R616 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R518 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | | R617 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W | |
| R519 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W | | R618 | 1-216-431-11 | METAL OXIDE | 560 | 5% | 1W | |
| R520 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W | | R619 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R521 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W | | R620 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W | |
| R522 | 1-215-469-00 | METAL | 100K | 1% | 1/6W | | R621 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W | |
| R523 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | | R622 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R524 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W | | R623 | 1-249-385-11 | CARBON | 2.2 | 5% | 1/4W | F |
| R525 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | | R624 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W | |
| R526 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W | F | R625 | 1-215-865-11 | METAL OXIDE | 220 | 5% | 1W | |
| R527 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W | | R626 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W | |
| R528 | 1-249-408-11 | CARBON | 180 | 5% | 1/4W | | R628 | 1-249-393-11 | CARBON | 10 | 5% | 1/4W | |
| R529 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W | | R629 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W | |
| R530 | 1-249-448-11 | CARBON | 1.2 | 5% | 1/4W | F | R630 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R531 | 1-247-881-00 | CARBON | 120K | 5% | 1/4W | | R633 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W | |
| R532 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | | R634 | 1-216-430-11 | METAL OXIDE | 390 | 5% | 1W | |
| R534 | 1-247-901-11 | CARBON | 820K | 5% | 1/4W | | | | | | | | |

D

V

The components identified by shading and mark  are critical for safety. Replace only with part number specified.

| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|---------------------|---------------|-------------------------------|---------------|---------------|-------------------------------|----------------------------|---------|
| R635 | 1-249-429-11 | CARBON | 10K 5% 1/4W | TP91 | *1-535-084-00 | 1P TERMINAL PIN | |
| R636 | 1-249-429-11 | CARBON | 10K 5% 1/4W | ***** | | | |
| R642 | 1-216-343-00 | METAL OXIDE | 0.33 5% 1W | *A-1347-030-A | V BOARD, COMPLETE | | |
| R643 | 1-217-192-21 | WIREWOUND | 0.22 10% 2W | | ***** | | |
| R647 | 1-216-485-11 | METAL OXIDE | 5.6K 5% 3W | *4-380-698-01 | CASE (MAIN), SHIELD, A1 | | |
| R648 | 1-216-485-11 | METAL OXIDE | 5.6K 5% 3W | *4-380-699-01 | CASE (UPPER LID), SHIELD, A1 | | |
| R649 | 1-249-385-11 | CARBON | 2.2 5% 1/4W | *4-382-701-01 | CASE (BOTTOM LID), SHIELD, A2 | | |
| R650 | 1-249-417-11 | CARBON | 1K 5% 1/4W | | | | |
| R651 | 1-249-405-11 | CARBON | 100 5% 1/4W | | | | |
| R652 | 1-247-903-00 | CARBON | 1M 5% 1/4W | | | | |
| R802 | 1-249-443-11 | CARBON | 0.47 5% 1/4W | | | | |
| R805 | 1-249-448-11 | CARBON | 1.2 5% 1/4W | | | | |
| R806 | 1-249-439-11 | CARBON | 68K 5% 1/4W | | | | |
| R807 | 1-216-869-11 | METAL OXIDE | 1K 5% 1W | | | | |
| R809 | 1-202-821-11 | SOLID | 1.8K 10% 1/2W | | | | |
| R810 | 1-202-818-00 | SOLID | 1K 10% 1/2W | | | | |
| R811 | 1-215-882-00 | METAL OXIDE | 22 5% 2W | | | | |
| R812 | 1-249-494-11 | CARBON | 68K 5% 1/2W | | | | |
| R815 | 1-215-884-11 | METAL OXIDE | 47 5% 2W | | | | |
| R816 | 1-215-868-00 | METAL OXIDE | 680 5% 1W | | | | |
| R817 | 1-249-417-11 | CARBON | 1K 5% 1/4W | | | | |
| R820 | 1-249-403-11 | CARBON | 68 5% 1/4W | | | | |
| R821 | 1-247-725-11 | CARBON | 10K 5% 1/4W | | | | |
| R822 | 1-217-778-11 | FUSIBLE | 1K 5% 1W | | | | |
| R825 | 1-216-345-11 | METAL OXIDE | 0.47 5% 1W | | | | |
| R826 | 1-249-441-11 | CARBON | 100K 5% 1/4W | | | | |
| R827 | 1-249-429-11 | CARBON | 10K 5% 1/4W | | | | |
| R828 | 1-249-423-11 | CARBON | 3.3K 5% 1/4W | | | | |
| R829 | 1-249-416-11 | CARBON | 820 5% 1/4W | | | | |
| R830 | 1-249-429-11 | CARBON | 10K 5% 1/4W | | | | |
| R831 | 1-249-451-11 | CARBON | 2.2 5% 1/4W | | | | |
| R1001 | 1-249-421-11 | CARBON | 2.2K 5% 1/4W | | | | |
| R1002 | 1-249-423-11 | CARBON | 3.3K 5% 1/4W | | | | |
| R1003 | 1-249-413-11 | CARBON | 470 5% 1/4W | | | | |
| R1005 | 1-249-408-11 | CARBON | 180 5% 1/4W | | | | |
| R1006 | 1-249-408-11 | CARBON | 180 5% 1/4W | | | | |
| R1007 | 1-249-408-11 | CARBON | 180 5% 1/4W | | | | |
| R1008 | 1-249-409-11 | CARBON | 220 5% 1/4W | | | | |
| R1009 | 1-249-417-11 | CARBON | 1K 5% 1/4W | | | | |
| R1012 | 1-249-405-11 | CARBON | 100 5% 1/4W | | | | |
| R5501 | 1-249-429-11 | CARBON | 10K 5% 1/4W | | | | |
| R5502 | 1-249-417-11 | CARBON | 1K 5% 1/4W | | | | |
| R5503 | 1-249-389-11 | CARBON | 4.7 5% 1/4W | | | | |
| R5504 | 1-247-903-00 | CARBON | 1M 5% 1/4W | | | | |
| R5505 | 1-249-393-11 | CARBON | 10 5% 1/4W | | | | |
| <VARIABLE RESISTOR> | | | | <CAPACITOR> | | | |
| RV501 | 1-228-991-00 | RES, ADJ, CARBON 2.2K | | C01 | 1-126-101-11 | ELECT 100MF | 20% 16V |
| RV502 | 1-228-994-00 | RES, ADJ, CARBON 10K | | C02 | 1-124-120-11 | ELECT 220MF | 20% 16V |
| RV601 | 1-228-991-00 | RES, ADJ, CARBON 2.2K | | C03 | 1-124-119-00 | ELECT 330MF | 20% 16V |
| <SPARK GAP> | | | | C04 | 1-124-477-11 | ELECT 47MF | 20% 16V |
| SG801 | 1-519-063-XX | DISCHARGING GAP | | C05 | 1-126-101-11 | ELECT 100MF | 20% 16V |
| <TRANSFORMER> | | | | C06 | 1-124-120-11 | ELECT 220MF | 20% 16V |
| T601 | 1-448-961-31 | S.R.T | | C07 | 1-124-499-11 | ELECT 1MF | 20% 50V |
| T602 | 1-424-011-12 | TRANSFORMER, PULSE | | C08 | 1-163-097-00 | CERAMIC CHIP 15PF | 5% 50V |
| T801 | 1-437-090-00 | HDT | | C09 | 1-163-141-00 | CERAMIC CHIP 0.001MF | 5% 50V |
| T802 | 1-439-416-11 | TRANSFORMER ASSY, FLYBACK | | C10 | 1-163-133-00 | CERAMIC CHIP 470PF | 5% 50V |
| <TERMINAL PIN> | | | | C11 | 1-163-037-11 | CERAMIC CHIP 0.022MF | 10% 25V |
| | | | | C12 | 1-163-127-00 | CERAMIC CHIP 270PF | 5% 50V |
| | | | | C13 | 1-163-117-00 | CERAMIC CHIP 100PF | 5% 50V |
| | | | | C14 | 1-163-097-00 | CERAMIC CHIP 15PF | 5% 50V |
| | | | | C15 | 1-163-103-00 | CERAMIC CHIP 27PF | 5% 50V |
| | | | | C16 | 1-163-021-00 | CERAMIC CHIP 0.01MF | 10% 50V |
| | | | | C17 | 1-163-809-11 | CERAMIC CHIP 0.047MF | 10% 25V |
| | | | | C18 | 1-163-099-00 | CERAMIC CHIP 18PF | 5% 50V |
| | | | | C19 | 1-163-809-11 | CERAMIC CHIP 0.047MF | 10% 25V |
| | | | | C20 | 1-163-125-00 | CERAMIC CHIP 220PF | 5% 50V |
| | | | | C21 | 1-163-833-00 | CERAMIC CHIP 0.068MF | 25V |
| | | | | C24 | 1-126-101-11 | ELECT 100MF | 20% 16V |
| | | | | C25 | 1-124-477-11 | ELECT 47MF | 20% 16V |
| | | | | C27 | 1-163-129-00 | CERAMIC CHIP 330PF | 5% 50V |
| | | | | C28 | 1-163-137-00 | CERAMIC CHIP 680PF | 5% 50V |
| | | | | C29 | 1-124-927-11 | ELECT 4.7MF | 20% 50V |
| | | | | C51 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V |
| | | | | C52 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V |
| | | | | C53 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V |
| | | | | C54 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V |
| | | | | C55 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V |
| | | | | C56 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V |
| | | | | C57 | 1-163-141-00 | CERAMIC CHIP 0.001MF | 5% 50V |
| | | | | C58 | 1-163-141-00 | CERAMIC CHIP 0.001MF | 5% 50V |
| | | | | C59 | 1-163-141-00 | CERAMIC CHIP 0.001MF | 5% 50V |
| <CONNECTOR> | | | | <TRIMMER> | | | |
| CNV03 | *1-508-784-00 | PIN, CONNECTOR (5MM PITCH) 1P | | CTO1 | 1-141-392-11 | CAP, VAR, TRIMMER (1 GANG) | |
| V1 | *1-560-123-00 | PLUG, CONNECTOR (2.5MM) 3P | | <DIODE> | | | |
| V2 | *1-560-125-00 | PLUG, CONNECTOR (2.5MM) 5P | | D01 | 8-719-400-47 | DIODE MA3056M | |
| V3 | *1-560-126-00 | PLUG, CONNECTOR (2.5MM) 6P | | | | | |
| V4 | *1-560-123-00 | PLUG, CONNECTOR (2.5MM PITCH) | | | | | |
| V5 | *1-560-290-00 | PLUG, CONNECTOR (2.5MM PITCH) | | | | | |

V

J1

| REF.NO. | PART NO. | DESCRIPTION | REMARK | REF.NO. | PART NO. | DESCRIPTION | REMARK |
|--------------|--------------|---------------------------|--------|----------------------------------|--------------|-----------------------|--------|
| D02 | 8-719-400-95 | DIODE MA3130L | | R38 | 1-216-047-00 | METAL GLAZE 820 5% | 1/10W |
| D03 | 8-719-400-18 | DIODE MA152WK | | R40 | 1-216-065-00 | METAL GLAZE 4.7K 5% | 1/10W |
| D04 | 8-719-105-52 | DIODE RD3.6M-B2 | | R41 | 1-216-041-00 | METAL GLAZE 470 5% | 1/10W |
| D07 | 8-719-400-63 | DIODE MA3068M | | R43 | 1-216-065-00 | METAL GLAZE 4.7K 5% | 1/10W |
| D08 | 8-719-400-63 | DIODE MA3068M | | R44 | 1-216-041-00 | METAL GLAZE 470 5% | 1/10W |
| D09 | 8-719-400-18 | DIODE MA152WK | | R45 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| D10 | 8-719-400-18 | DIODE MA152WK | | R46 | 1-216-311-00 | METAL GLAZE 6.8 5% | 1/10W |
| D11 | 8-719-914-44 | DIODE DAP202K | | R51 | 1-216-065-00 | METAL GLAZE 4.7K 5% | 1/10W |
| D12 | 8-719-914-44 | DIODE DAP202K | | R52 | 1-216-065-00 | METAL GLAZE 4.7K 5% | 1/10W |
| <IC> | | | | R53 | 1-216-065-00 | METAL GLAZE 4.7K 5% | 1/10W |
| IC1 | 8-759-972-41 | IC MAB8461P-W136 | | R54 | 1-216-065-00 | METAL GLAZE 4.7K 5% | 1/10W |
| IC2 | 8-759-972-96 | IC SAA5231-V6 | | R55 | 1-216-057-00 | METAL GLAZE 2.2K 5% | 1/10W |
| IC3 | 8-759-013-21 | IC SDA5241 | | R56 | 1-216-065-00 | METAL GLAZE 4.7K 5% | 1/10W |
| IC4 | 8-759-230-68 | IC TMM2063P-70 | | R57 | 1-216-065-00 | METAL GLAZE 4.7K 5% | 1/10W |
| <COIL> | | | | R58 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| L01 | 1-408-411-00 | INDUCTOR 15UH | | R59 | 1-216-056-00 | METAL GLAZE 2K 5% | 1/10W |
| L02 | 1-408-407-00 | INDUCTOR 6.8UH | | R60 | 1-216-063-00 | METAL GLAZE 3.9K 5% | 1/10W |
| L03 | 1-408-407-00 | INDUCTOR 6.8UH | | R61 | 1-216-071-00 | METAL GLAZE 8.2K 5% | 1/10W |
| L04 | 1-408-407-00 | INDUCTOR 6.8UH | | R62 | 1-216-065-00 | METAL GLAZE 4.7K 5% | 1/10W |
| L05 | 1-408-407-00 | INDUCTOR 6.8UH | | R63 | 1-216-065-00 | METAL GLAZE 4.7K 5% | 1/10W |
| L06 | 1-408-407-00 | INDUCTOR 6.8UH | | R64 | 1-216-065-00 | METAL GLAZE 4.7K 5% | 1/10W |
| <TRANSISTOR> | | | | R65 | 1-216-065-00 | METAL GLAZE 4.7K 5% | 1/10W |
| Q01 | 8-729-920-92 | TRANSISTOR 2SD2096-EF | | R66 | 1-216-065-00 | METAL GLAZE 4.7K 5% | 1/10W |
| Q02 | 8-729-807-50 | TRANSISTOR 2SD1623-R | | R67 | 1-216-065-00 | METAL GLAZE 4.7K 5% | 1/10W |
| Q03 | 8-729-900-53 | TRANSISTOR DTC114EK | | R68 | 1-216-065-00 | METAL GLAZE 4.7K 5% | 1/10W |
| Q04 | 8-729-271-22 | TRANSISTOR 2SC2712-G | | R69 | 1-216-065-00 | METAL GLAZE 4.7K 5% | 1/10W |
| Q05 | 8-729-807-50 | TRANSISTOR 2SD1623-R | | <VARIABLE RESISTOR> | | | |
| Q06 | 8-729-271-22 | TRANSISTOR 2SC2712-G | | RV01 | 1-238-009-11 | RES, ADJ, CARBON 220 | |
| Q07 | 8-729-900-98 | TRANSISTOR DTC143TK | | <CRYSTAL> | | | |
| Q09 | 8-729-800-68 | TRANSISTOR 2SB815B6 | | X01 | 1-567-162-21 | OSCILLATOR, CRYSTAL | |
| Q10 | 8-729-800-68 | TRANSISTOR 2SB815B6 | | X02 | 1-567-495-21 | OSCILLATOR, CRYSTAL | |
| Q11 | 8-729-800-68 | TRANSISTOR 2SB815B6 | | X03 | 1-577-082-11 | VIBRATOR, CERAMIC | |
| <RESISTOR> | | | | ***** | | | |
| R01 | 1-218-326-11 | METAL GLAZE 470 1/2W | | *A-1371-373-A J1 BOARD, COMPLETE | | | |
| R02 | 1-216-065-00 | METAL GLAZE 4.7K 5% 1/10W | | ***** | | | |
| R04 | 1-218-326-11 | METAL GLAZE 470 1/2W | | <CAPACITOR> | | | |
| R05 | 1-216-025-00 | METAL GLAZE 100 5% 1/10W | | C1401 | 1-123-875-11 | ELECT 10MF 20% 50V | |
| R06 | 1-216-049-00 | METAL GLAZE 1K 5% 1/10W | | C1402 | 1-126-103-11 | ELECT 470MF 20% 16V | |
| R07 | 1-216-025-00 | METAL GLAZE 100 5% 1/10W | | C1403 | 1-102-112-00 | CERAMIC 330PF 10% 50V | |
| R08 | 1-216-037-00 | METAL GLAZE 330 5% 1/10W | | C1404 | 1-124-902-00 | ELECT 0.47MF 20% 50V | |
| R09 | 1-216-091-00 | METAL GLAZE 56K 5% 1/10W | | C1405 | 1-101-003-00 | CERAMIC 0.0047MF 50V | |
| R13 | 1-216-025-00 | METAL GLAZE 100 5% 1/10W | | C1406 | 1-124-902-00 | ELECT 0.47MF 20% 50V | |
| R14 | 1-216-025-00 | METAL GLAZE 100 5% 1/10W | | C1407 | 1-124-477-11 | ELECT 47MF 20% 16V | |
| R15 | 1-216-121-00 | METAL GLAZE 1M 5% 1/10W | | C1408 | 1-126-101-11 | ELECT 100MF 20% 16V | |
| R16 | 1-216-055-00 | METAL GLAZE 1.8K 5% 1/10W | | C1409 | 1-126-233-11 | ELECT 22MF 20% 50V | |
| R17 | 1-216-049-00 | METAL GLAZE 1K 5% 1/10W | | C1410 | 1-123-875-11 | ELECT 10MF 20% 50V | |
| R18 | 1-216-065-00 | METAL GLAZE 4.7K 5% 1/10W | | C1411 | 1-123-875-11 | ELECT 10MF 20% 50V | |
| R19 | 1-216-037-00 | METAL GLAZE 330 5% 1/10W | | C1412 | 1-124-477-11 | ELECT 47MF 20% 16V | |
| R20 | 1-216-043-00 | METAL GLAZE 560 5% 1/10W | | C1413 | 1-124-477-11 | ELECT 47MF 20% 16V | |
| R27 | 1-216-013-00 | METAL GLAZE 33 5% 1/10W | | C1414 | 1-123-875-11 | ELECT 10MF 20% 50V | |
| R28 | 1-216-013-00 | METAL GLAZE 33 5% 1/10W | | C1415 | 1-124-902-00 | ELECT 0.47MF 20% 50V | |
| R29 | 1-216-013-00 | METAL GLAZE 33 5% 1/10W | | C1416 | 1-124-902-00 | ELECT 0.47MF 20% 50V | |
| R30 | 1-218-325-11 | METAL GLAZE 120 1/4W | | C1417 | 1-124-120-11 | ELECT 220MF 20% 16V | |
| R31 | 1-218-325-11 | METAL GLAZE 120 1/4W | | C1418 | 1-102-112-00 | CERAMIC 330PF 10% 50V | |
| R32 | 1-218-325-11 | METAL GLAZE 120 1/4W | | C1419 | 1-102-112-00 | CERAMIC 330PF 10% 50V | |
| R33 | 1-216-023-00 | METAL GLAZE 82 5% 1/10W | | C1421 | 1-124-477-11 | ELECT 47MF 20% 16V | |
| R34 | 1-216-049-00 | METAL GLAZE 1K 5% 1/10W | | | | | |
| R37 | 1-216-025-00 | METAL GLAZE 100 5% 1/10W | | | | | |

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| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|--------------|--------------|-------------|--------------|---------------------|--------------|----------------------|--------------|
| <COIL> | | | | R328 | 1-249-397-11 | CARBON | 22 5% 1/4W |
| L301 | 1-410-868-21 | INDUCTOR | 4.7UH | R329 | 1-249-397-11 | CARBON | 22 5% 1/4W |
| L302 | 1-410-868-21 | INDUCTOR | 4.7UH | R330 | 1-249-397-11 | CARBON | 22 5% 1/4W |
| L303 | 1-408-408-00 | INDUCTOR | 8.2UH | R331 | 1-249-418-11 | CARBON | 1.2K 5% 1/4W |
| L304 | 1-408-409-00 | INDUCTOR | 10UH | R332 | 1-249-401-11 | CARBON | 47 5% 1/4W |
| L331 | 1-408-408-00 | INDUCTOR | 8.2UH | R333 | 1-249-412-11 | CARBON | 390 5% 1/4W |
| L332 | 1-404-539-11 | COIL | | R334 | 1-249-408-11 | CARBON | 180 5% 1/4W |
| L333 | 1-404-554-11 | COIL | | R335 | 1-249-415-11 | CARBON | 680 5% 1/4W |
| L334 | 1-404-554-11 | COIL | | R336 | 1-249-418-11 | CARBON | 1.2K 5% 1/4W |
| L335 | 1-404-554-11 | COIL | | R337 | 1-247-848-11 | CARBON | 5.1K 5% 1/4W |
| L336 | 1-408-417-00 | INDUCTOR | 47UH | R338 | 1-249-429-11 | CARBON | 10K 5% 1/4W |
| L338 | 1-408-416-00 | INDUCTOR | 39UH | R339 | 1-249-409-11 | CARBON | 220 5% 1/4W |
| L339 | 1-410-868-21 | INDUCTOR | 4.7UH | R340 | 1-249-437-11 | CARBON | 47K 5% 1/4W |
| <TRANSISTOR> | | | | R341 | 1-249-410-11 | CARBON | 270 5% 1/4W |
| Q302 | 8-729-119-78 | TRANSISTOR | 2SC2785-HFE | R342 | 1-249-429-11 | CARBON | 10K 5% 1/4W |
| Q303 | 8-729-119-78 | TRANSISTOR | 2SC2785-HFE | R343 | 1-249-429-11 | CARBON | 10K 5% 1/4W |
| Q305 | 8-729-900-36 | TRANSISTOR | DTC124ES | R344 | 1-249-437-11 | CARBON | 47K 5% 1/4W |
| Q306 | 8-729-119-78 | TRANSISTOR | 2SC2785-HFE | R346 | 1-249-419-11 | CARBON | 1.5K 5% 1/4W |
| Q311 | 8-729-119-78 | TRANSISTOR | 2SC2785-HFE | R347 | 1-249-429-11 | CARBON | 10K 5% 1/4W |
| Q312 | 8-729-119-78 | TRANSISTOR | 2SC2785-HFE | R348 | 1-249-437-11 | CARBON | 47K 5% 1/4W |
| Q313 | 8-729-119-78 | TRANSISTOR | 2SC2785-HFE | R349 | 1-249-415-11 | CARBON | 680 5% 1/4W |
| Q316 | 8-729-119-78 | TRANSISTOR | 2SC2785-HFE | R350 | 1-249-415-11 | CARBON | 680 5% 1/4W |
| Q331 | 8-729-119-78 | TRANSISTOR | 2SC2785-HFE | R351 | 1-249-409-11 | CARBON | 220 5% 1/4W |
| Q332 | 8-729-900-36 | TRANSISTOR | DTC124ES | R352 | 1-247-891-00 | CARBON | 330K 5% 1/4W |
| Q333 | 8-729-900-36 | TRANSISTOR | DTC124ES | R353 | 1-247-891-00 | CARBON | 330K 5% 1/4W |
| Q334 | 8-729-119-78 | TRANSISTOR | 2SC2785-HFE | R354 | 1-249-409-11 | CARBON | 220 5% 1/4W |
| Q335 | 8-729-119-78 | TRANSISTOR | 2SC2785-HFE | R355 | 1-249-423-11 | CARBON | 3.3K 5% 1/4W |
| Q336 | 8-729-119-78 | TRANSISTOR | 2SC2785-HFE | R356 | 1-249-427-11 | CARBON | 6.8K 5% 1/4W |
| Q381 | 8-729-900-36 | TRANSISTOR | DTC124ES | R358 | 1-249-409-11 | CARBON | 220 5% 1/4W |
| Q382 | 8-729-119-78 | TRANSISTOR | 2SC2785-HFE | R359 | 1-249-437-11 | CARBON | 47K 5% 1/4W |
| Q1306 | 8-729-173-38 | TRANSISTOR | 2SA733-K | R360 | 1-249-437-11 | CARBON | 47K 5% 1/4W |
| <RESISTOR> | | | | R361 | 1-249-418-11 | CARBON | 1.2K 5% 1/4W |
| R301 | 1-249-409-11 | CARBON | 220 5% 1/4W | R363 | 1-249-410-11 | CARBON | 270 5% 1/4W |
| R302 | 1-249-409-11 | CARBON | 220 5% 1/4W | R364 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| R303 | 1-249-409-11 | CARBON | 220 5% 1/4W | R365 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| R304 | 1-249-409-11 | CARBON | 220 5% 1/4W | R367 | 1-249-409-11 | CARBON | 220 5% 1/4W |
| R305 | 1-249-421-11 | CARBON | 2.2K 5% 1/4W | R368 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| R307 | 1-249-441-11 | CARBON | 100K 5% 1/4W | R369 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| R308 | 1-249-414-11 | CARBON | 560 5% 1/4W | R370 | 1-249-418-11 | CARBON | 1.2K 5% 1/4W |
| R309 | 1-249-405-11 | CARBON | 100 5% 1/4W | R371 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| R310 | 1-249-405-11 | CARBON | 100 5% 1/4W | R376 | 1-249-429-11 | CARBON | 10K 5% 1/4W |
| R311 | 1-249-405-11 | CARBON | 100 5% 1/4W | R378 | 1-249-441-11 | CARBON | 100K 5% 1/4W |
| R312 | 1-249-409-11 | CARBON | 220 5% 1/4W | R379 | 1-249-441-11 | CARBON | 100K 5% 1/4W |
| R313 | 1-249-433-11 | CARBON | 22K 5% 1/4W | R380 | 1-249-426-11 | CARBON | 5.6K 5% 1/4W |
| R314 | 1-249-413-11 | CARBON | 470 5% 1/4W | R381 | 1-249-439-11 | CARBON | 68K 5% 1/4W |
| R315 | 1-249-407-11 | CARBON | 150 5% 1/4W | R382 | 1-247-885-00 | CARBON | 180K 5% 1/4W |
| R316 | 1-249-407-11 | CARBON | 150 5% 1/4W | R383 | 1-247-893-11 | CARBON | 390K 5% 1/4W |
| R317 | 1-249-407-11 | CARBON | 150 5% 1/4W | R385 | 1-249-435-11 | CARBON | 33K 5% 1/4W |
| R318 | 1-249-429-11 | CARBON | 10K 5% 1/4W | R389 | 1-247-883-00 | CARBON | 150K 5% 1/4W |
| R319 | 1-249-409-11 | CARBON | 220 5% 1/4W | R390 | 1-249-411-11 | CARBON | 330 5% 1/4W |
| R320 | 1-249-417-11 | CARBON | 1K 5% 1/4W | R391 | 1-249-404-00 | CARBON | 82 5% 1/4W |
| R321 | 1-249-421-11 | CARBON | 2.2K 5% 1/4W | R392 | 1-249-402-11 | CARBON | 56 5% 1/4W |
| R322 | 1-249-420-11 | CARBON | 1.8K 5% 1/4W | R393 | 1-249-402-11 | CARBON | 56 5% 1/4W |
| R323 | 1-249-421-11 | CARBON | 2.2K 5% 1/4W | R394 | 1-249-402-11 | CARBON | 56 5% 1/4W |
| R324 | 1-249-426-11 | CARBON | 5.6K 5% 1/4W | R398 | 1-249-433-11 | CARBON | 22K 5% 1/4W |
| R325 | 1-249-429-11 | CARBON | 10K 5% 1/4W | R1324 | 1-249-419-11 | CARBON | 1.5K 5% 1/4W |
| R326 | 1-249-419-11 | CARBON | 1.5K 5% 1/4W | <VARIABLE RESISTOR> | | | |
| R327 | 1-249-427-11 | CARBON | 6.8K 5% 1/4W | RV331 | 1-238-009-11 | RES, ADJ, CARBON 220 | |

The components identified by shading and mark Δ are critical for safety.
Replace only with part number specified.

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A

| REF.NO. | PART NO. | DESCRIPTION | REMARK | REF.NO. | PART NO. | DESCRIPTION | REMARK |
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| <TRANSFORMER> | | | | <CRYSTAL> | | | |
| T331 | 1-404-584-11 | COIL | | <CAPACITOR> | | | |
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| X331 | 1-567-307-11 | OSCILLATOR, CRYSTAL | | CNF262 | *1-566-664-11 | PIN, CONNECTOR 4P | |
| X332 | 1-567-131-00 | OSCILLATOR, CRYSTAL | | <SWITCH> | | | |
| ***** | | | | S1701 | *1-571-410-11 | SWITCH, PUSH (AC POWER) (1 KEY) | |
| ***** | | | | <CAPACITOR> | | | |
| ***** | | | | C1601 | *1-136-518-11 | FILM 0.33MF 20% 300V | |
| ***** | | | | C1602 | *1-136-519-11 | FILM 0.47MF 20% 300V | |
| ***** | | | | C1603 | *1-162-578-51 | CERAMIC 0.0047MF 20% 400V | |
| ***** | | | | C1604 | *1-162-578-51 | CERAMIC 0.0047MF 20% 400V | |
| ***** | | | | C1605 | *1-162-578-51 | CERAMIC 0.0047MF 20% 400V | |
| ***** | | | | C1606 | *1-162-578-51 | CERAMIC 0.0047MF 20% 400V | |
| ***** | | | | C1607 | *1-161-964-61 | CERAMIC 0.0047MF 250V | |
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| <CAPACITOR> | | | | CNF64 | *1-506-348-XX | PIN, CONNECTOR 3P | |
| <CONNECTOR> | | | | CNF65 | *1-508-765-00 | PIN, CONNECTOR (5MM PITCH) 3P | |
| <FUSE> | | | | CNF66 | *1-508-786-00 | PIN, CONNECTOR (5MM PITCH) 2P | |
| <FILTER> | | | | CNF67 | *1-560-290-00 | PLUG, CONNECTOR (2.5MM PITCH) | |
| <RESISTOR> | | | | CNF162 | *1-506-348-XX | PIN, CONNECTOR 4P | |
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| <CRYSTAL> | | | | F1601 | *1-532-350-11 | FUSE, TIME-LAG 4A/250V | |
| <CAPACITOR> | | | | | 1-533-087-00 | HOLDER, FUSE; F1601 | |
| <CONNECTOR> | | | | <FILTER> | | | |
| <SWITCH> | | | | ALF1601 | 1-421-866-12 | LFT | |
| <CAPACITOR> | | | | ALF1602 | 1-421-776-11 | LFT | |
| <CONNECTOR> | | | | ALF1603 | 1-421-592-11 | TRANSFORMER, FERRITE | |
| <FUSE> | | | | <RESISTOR> | | | |
| <FILTER> | | | | R1601 | *1-246-513-75 | CARBON 47K 5% 1/4W | |
| <RESISTOR> | | | | R1602 | *1-244-945-91 | CARBON 1M 5% 1/2W | |
| <THERMISTOR> | | | | R1603 | *1-217-328-11 | WIREWOUND 2.7 10% 7W F | |
| <CRYSTAL> | | | | R1604 | *1-246-513-75 | CARBON 47K 5% 1/4W | |
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| REF.NO. | PART NO. | DESCRIPTION | REMARK | REF.NO. | PART NO. | DESCRIPTION | REMARK |
|--------------|---------------|-------------------------------|------------------|------------|--------------|------------------------|--------|
| C155 | 1-124-963-11 | ELECT | 33MF 20% 16V | Q101 | 8-729-900-61 | TRANSISTOR DTA114ES | |
| C156 | 1-136-157-00 | FILM | 0.022MF 5% 50V | Q102 | 8-729-900-61 | TRANSISTOR DTA114ES | |
| C157 | 1-136-161-00 | FILM | 0.047MF 5% 50V | Q103 | 8-729-900-61 | TRANSISTOR DTA114ES | |
| C158 | 1-124-963-11 | ELECT | 33MF 20% 16V | Q104 | 8-729-900-61 | TRANSISTOR DTA114ES | |
| C159 | 1-124-477-11 | ELECT | 47MF 20% 16V | Q105 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | |
| C161 | 1-124-477-11 | ELECT | 47MF 20% 16V | Q106 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | |
| C162 | 1-102-816-00 | CERAMIC | 120PF 5% 50V | Q107 | 8-729-173-38 | TRANSISTOR 2SA733-K | |
| C163 | 1-124-927-11 | ELECT | 4.7MF 20% 50V | Q108 | 8-729-900-65 | TRANSISTOR DTA144ES | |
| C164 | 1-106-367-00 | MYLAR | 0.01MF 10% 400V | Q109 | 8-729-900-89 | TRANSISTOR DTC144ES | |
| C165 | 1-136-287-11 | FILM | 0.0047MF 5% 50V | Q110 | 8-729-173-38 | TRANSISTOR 2SA733-K | |
| C167 | 1-124-499-11 | ELECT | 1MF 20% 50V | Q111 | 8-729-900-89 | TRANSISTOR DTC144ES | |
| C168 | 1-106-228-00 | MYLAR | 0.22MF 10% 100V | Q112 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | |
| C169 | 1-123-875-11 | ELECT | 10MF 20% 50V | Q113 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | |
| C174 | 1-124-499-11 | ELECT | 1MF 20% 50V | Q116 | 8-729-900-65 | TRANSISTOR DTA144ES | |
| C177 | 1-102-119-00 | CERAMIC | 0.0015MF 10% 50V | Q117 | 8-729-173-38 | TRANSISTOR 2SA733-K | |
| C187 | 1-101-003-00 | CERAMIC | 0.0047MF 50V | <RESISTOR> | | | |
| C188 | 1-124-963-11 | ELECT | 33MF 20% 16V | R101 | 1-249-405-11 | CARBON 100 5% 1/4W | |
| C189 | 1-124-963-11 | ELECT | 33MF 20% 16V | R102 | 1-249-423-11 | CARBON 3.3K 5% 1/4W | |
| C190 | 1-106-220-00 | MYLAR | 0.1MF 10% 100V | R103 | 1-249-433-11 | CARBON 22K 5% 1/4W | |
| <FILTER> | | | | R104 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| CD102 | 1-404-745-11 | DISCRIMINATOR, CERAMIC | | R105 | 1-249-418-11 | CARBON 1.2K 5% 1/4W | |
| CD103 | 1-404-746-11 | DISCRIMINATOR, CERAMIC | | R106 | 1-247-891-00 | CARBON 330K 5% 1/4W | |
| CF101 | 1-404-134-00 | TRAP, CERAMIC (5.5MHZ) | | R107 | 1-249-421-11 | CARBON 2.2K 5% 1/4W | |
| CF103 | 1-527-840-00 | FILTER, CERAMIC | | R108 | 1-249-421-11 | CARBON 2.2K 5% 1/4W | |
| CF104 | 1-527-839-00 | FILTER, CERAMIC | | R109 | 1-249-423-11 | CARBON 3.3K 5% 1/4W | |
| SWF101 | 1-577-254-11 | SAWF | | R110 | 1-249-410-11 | CARBON 270 5% 1/4W | |
| <CONNECTOR> | | | | R111 | 1-249-418-11 | CARBON 1.2K 5% 1/4W | |
| CNA11 | *1-566-659-11 | CONNECTOR, HINGE (SOCKET) 18P | | R112 | 1-249-421-11 | CARBON 2.2K 5% 1/4W | |
| <DIODE> | | | | R114 | 1-249-413-11 | CARBON 470 5% 1/4W | |
| D105 | 8-719-109-92 | DIODE RD6.2ES-B1 | | R115 | 1-249-413-11 | CARBON 470 5% 1/4W | |
| D106 | 8-719-911-19 | DIODE 1SS119 | | R116 | 1-249-419-11 | CARBON 1.5K 5% 1/4W | |
| D108 | 8-719-000-06 | DIODE MC921 | | R117 | 1-249-431-11 | CARBON 15K 5% 1/4W | |
| D110 | 8-719-911-19 | DIODE 1SS119 | | R118 | 1-249-425-11 | CARBON 4.7K 5% 1/4W | |
| D111 | 8-719-109-68 | DIODE RD3.6ES-B1 | | R119 | 1-249-417-11 | CARBON 1K 5% 1/4W | |
| <IC> | | | | R121 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| IC101 | 8-759-909-08 | IC TDA3541 | | R122 | 1-249-436-11 | CARBON 39K 5% 1/4W | |
| IC102 | 8-759-973-86 | IC TDA2558 | | R123 | 1-249-417-11 | CARBON 1K 5% 1/4W | |
| IC103 | 8-759-030-48 | IC TDA6600-2 | | R124 | 1-249-423-11 | CARBON 3.3K 5% 1/4W | |
| IC104 | 8-759-946-99 | IC TDA2595-V7 | | R125 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| <COIL> | | | | R126 | 1-249-436-11 | CARBON 39K 5% 1/4W | |
| L101 | 1-408-226-00 | INDUCTOR 82UH | | R127 | 1-249-432-11 | CARBON 18K 5% 1/4W | |
| L102 | 1-410-116-11 | INDUCTOR 0.56MMH | | R128 | 1-249-432-11 | CARBON 18K 5% 1/4W | |
| L103 | 1-408-406-00 | INDUCTOR 5.6UH | | R129 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| L104 | 1-408-411-00 | INDUCTOR 15UH | | R130 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| L106 | 1-408-415-00 | INDUCTOR 33UH | | R132 | 1-249-414-11 | CARBON 560 5% 1/4W | |
| L107 | 1-408-406-00 | INDUCTOR 5.6UH | | R133 | 1-249-425-11 | CARBON 4.7K 5% 1/4W | |
| L108 | 1-408-412-00 | INDUCTOR 18UH | | R134 | 1-249-414-11 | CARBON 560 5% 1/4W | |
| L109 | 1-408-412-00 | INDUCTOR 18UH | | R135 | 1-249-419-11 | CARBON 1.5K 5% 1/4W | |
| L110 | 1-410-064-11 | INDUCTOR 2.7MMH | | R136 | 1-249-414-11 | CARBON 560 5% 1/4W | |
| L111 | 1-408-421-00 | INDUCTOR 100UH | | R137 | 1-249-414-11 | CARBON 560 5% 1/4W | |
| L113 | 1-408-399-00 | INDUCTOR 1.5UH | | R138 | 1-249-419-11 | CARBON 1.5K 5% 1/4W | |
| <TRANSISTOR> | | | | R139 | 1-249-431-11 | CARBON 15K 5% 1/4W | |
| | | | | R140 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| | | | | R141 | 1-249-425-11 | CARBON 4.7K 5% 1/4W | |
| | | | | R142 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| | | | | R143 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| | | | | R144 | 1-249-422-11 | CARBON 2.7K 5% 1/4W | |
| | | | | R146 | 1-249-424-11 | CARBON 3.9K 5% 1/4W | |
| | | | | R148 | 1-249-413-11 | CARBON 470 5% 1/4W | |
| | | | | R150 | 1-249-423-11 | CARBON 3.3K 5% 1/4W | |
| | | | | R151 | 1-249-423-11 | CARBON 3.3K 5% 1/4W | |
| | | | | R152 | 1-249-431-11 | CARBON 15K 5% 1/4W | |

J1

J2

H3

H4

Ks

| REF.NO. | PART NO. | DESCRIPTION | REMARK |
|---------|--------------|---------------------|--------|
| R1504 | 1-249-435-11 | CARBON 33K 5% 1/4W | |
| R1505 | 1-249-433-11 | CARBON 22K 5% 1/4W | |
| R1506 | 1-247-895-00 | CARBON 470K 5% 1/4W | |
| R1509 | 1-247-887-00 | CARBON 220K 5% 1/4W | |
| R1510 | 1-249-426-11 | CARBON 5.6K 5% 1/4W | |
| R1511 | 1-249-417-11 | CARBON 1K 5% 1/4W | |
| R1512 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R1513 | 1-249-438-11 | CARBON 56K 5% 1/4W | |
| R1514 | 1-249-417-11 | CARBON 1K 5% 1/4W | |
| R1515 | 1-247-899-11 | CARBON 680K 5% 1/4W | |
| R1516 | 1-249-432-11 | CARBON 18K 5% 1/4W | |
| R1517 | 1-249-410-11 | CARBON 270 5% 1/4W | |
| R1518 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R1519 | 1-247-883-00 | CARBON 150K 5% 1/4W | |
| R1520 | 1-247-895-00 | CARBON 470K 5% 1/4W | |
| R1521 | 1-249-425-11 | CARBON 4.7K 5% 1/4W | |
| R1556 | 1-249-426-11 | CARBON 5.6K 5% 1/4W | |

<VARIABLE RESISTOR>

| | | |
|--------|--------------|-----------------------|
| RV1501 | 1-238-023-11 | RES, ADJ, CARBON 470K |
| RV1502 | 1-228-994-00 | RES, ADJ, CARBON 10K |
| RV1503 | 1-238-017-11 | RES, ADJ, CARBON 22K |
| RV1504 | 1-238-012-11 | RES, ADJ, CARBON 1K |
| RV1505 | 1-238-023-11 | RES, ADJ, CARBON 470K |
| RV1506 | 1-238-017-11 | RES, ADJ, CARBON 22K |
| RV1507 | 1-238-009-11 | RES, ADJ, CARBON 220 |
| RV1508 | 1-238-016-11 | RES, ADJ, CARBON 10K |
| RV1509 | 1-228-999-00 | RES, ADJ, CARBON 470K |

*1-629-783-21 J2 BOARD

<CAPACITOR>

| | | |
|-------|--------------|----------------------|
| C1401 | 1-126-105-11 | ELECT 1000MF 20% 35V |
| C1402 | 1-126-105-11 | ELECT 1000MF 20% 35V |

<CONNECTOR>

| | | |
|--------|---------------|--------------------|
| CNJ23 | *1-564-893-11 | PLUG, CONNECTOR 4P |
| CNJ242 | *1-564-893-11 | PLUG, CONNECTOR 4P |

<JACK>

| | | |
|-------|--------------|------|
| J1401 | 1-507-806-00 | JACK |
|-------|--------------|------|

<RESISTOR>

| | | |
|-------|--------------|--------------------|
| R1401 | 1-247-708-11 | CARBON 470 5% 1/4W |
| R1402 | 1-247-708-11 | CARBON 470 5% 1/4W |

*1-629-785-21 H3 BOARD

<CONNECTOR>

| | | |
|--------|---------------|--------------------|
| CNH302 | *1-564-898-11 | PLUG, CONNECTOR 9P |
| CNH303 | *1-564-892-41 | PLUG, CONNECTOR 3P |

<DIODE>

| REF.NO. | PART NO. | DESCRIPTION | REMARK |
|----------|-------------------------------|------------------------------------|--------|
| D1405 | 8-719-812-41 *4-348-208-00 | DIODE TLR124 HOLDER, LED; D1405 | |
| <SWITCH> | | | |
| S1401 | 1-571-085-21 | SWITCH, TACTICLE | |
| S1402 | 1-571-085-21 | SWITCH, TACTICLE | |
| S1403 | 1-571-085-21 | SWITCH, TACTICLE | |
| S1404 | 1-571-085-21 | SWITCH, TACTICLE | |
| S1405 | 1-571-085-21 | SWITCH, TACTICLE | |
| S1406 | 1-571-085-21 | SWITCH, TACTICLE | |
| S1407 | 1-571-085-21 | SWITCH, TACTICLE | |
| S1408 | 1-571-085-21 | SWITCH, TACTICLE | |
| S1409 | 1-571-085-21 | SWITCH, TACTICLE | |
| S1410 | 1-571-085-21 | SWITCH, TACTICLE | |
| S1411 | 1-571-085-21 | SWITCH, TACTICLE | |
| S1412 | 1-571-085-21 | SWITCH, TACTICLE | |
| S1414 | 1-571-085-21 | SWITCH, TACTICLE | |

*1-629-786-21 H4 BOARD

*4-374-987-01 GUIDE, LIGHT
*4-388-955-01 BRACKET (B), LIGHT GUIDE

<CONNECTOR>

| | | |
|--------|---------------|--------------------|
| CNH401 | *1-564-884-11 | PLUG, CONNECTOR 7P |
| CNH403 | *1-564-880-31 | PLUG, CONNECTOR 3P |

<DIODE>

| | | |
|-------|---------------|--------------------|
| D1401 | 8-719-948-31 | DIODE LD-201VR |
| | *4-387-825-01 | HOLDER, LED; D1401 |
| D1402 | 8-719-948-31 | DIODE LD-201VR |
| | *4-387-825-01 | HOLDER, LED; D1402 |
| D1403 | 8-719-948-31 | DIODE LD-201VR |
| | *4-387-825-01 | HOLDER, LED; D1403 |
| D1404 | 8-719-948-31 | DIODE LD-201VR |

<IC>

| | | |
|--------|--------------|---------------|
| IC1401 | 8-741-138-70 | IC BX-1387 |
| IC1401 | 8-749-901-33 | IC SBX1483-11 |

*1-629-781-21 KS BOARD

<CAPACITOR>

| | | |
|------|--------------|-------------------------|
| C202 | 1-124-902-00 | ELECT 0.47MF 20% 50V |
| C203 | 1-124-477-11 | ELECT 47MF 20% 16V |
| C204 | 1-124-902-00 | ELECT 0.47MF 20% 50V |
| C205 | 1-124-927-11 | ELECT 4.7MF 20% 50V |
| C206 | 1-124-477-11 | ELECT 47MF 20% 16V |
| C207 | 1-124-927-11 | ELECT 4.7MF 20% 50V |
| C213 | 1-126-233-11 | ELECT 22MF 20% 50V |
| C214 | 1-106-363-00 | MYLAR 0.0068MF 10% 400V |
| C217 | 1-106-363-00 | MYLAR 0.0068MF 10% 400V |
| C218 | 1-106-375-12 | MYLAR 0.022MF 10% 250V |
| C219 | 1-106-375-12 | MYLAR 0.022MF 10% 250V |

Ks

The components identified by shading and mark Δ are critical for safety.
Replace only with part number specified.

| REF.NO. | PART NO. | DESCRIPTION | REMARK | REF.NO. | PART NO. | DESCRIPTION | REMARK |
|--------------|---------------|-------------------------------|--------------|-----------------------------------|------------------------------|-----------------------------------|---------------------|
| C220 | 1-108-620-11 | MYLAR | 0.0033MF 10% | 100V | R221 | 1-249-417-11 | CARBON 1K 5% 1/4W |
| C221 | 1-108-620-11 | MYLAR | 0.0033MF 10% | 100V | R222 | 1-249-417-11 | CARBON 1K 5% 1/4W |
| C222 | 1-106-375-12 | MYLAR | 0.022MF 10% | 250V | R223 | 1-249-413-11 | CARBON 470 5% 1/4W |
| C223 | 1-106-375-12 | MYLAR | 0.022MF 10% | 250V | R224 | 1-249-413-11 | CARBON 470 5% 1/4W |
| C224 | 1-106-367-00 | MYLAR | 0.01MF 10% | 400V | R225 | 1-249-417-11 | CARBON 1K 5% 1/4W |
| C225 | 1-136-173-00 | FILM | 0.47MF 5% | 50V | R226 | 1-249-417-11 | CARBON 1K 5% 1/4W |
| C226 | 1-136-173-00 | FILM | 0.47MF 5% | 50V | R227 | 1-249-417-11 | CARBON 1K 5% 1/4W |
| C227 | 1-106-375-12 | MYLAR | 0.022MF 10% | 250V | R228 | 1-249-417-11 | CARBON 1K 5% 1/4W |
| C228 | 1-106-379-12 | MYLAR | 0.033MF 10% | 250V | R229 | 1-249-441-11 | CARBON 100K 5% 1/4W |
| C229 | 1-106-371-00 | MYLAR | 0.015MF 10% | 400V | R230 | 1-249-441-11 | CARBON 100K 5% 1/4W |
| C230 | 1-106-371-00 | MYLAR | 0.015MF 10% | 400V | R231 | 1-249-437-11 | CARBON 47K 5% 1/4W |
| C231 | 1-124-902-00 | ELECT | 0.47MF 20% | 50V | R232 | 1-249-437-11 | CARBON 47K 5% 1/4W |
| C232 | 1-123-875-11 | ELECT | 10MF 20% | 50V | ***** | | |
| C233 | 1-102-114-00 | CERAMIC | 470PF 10% | 50V | MISCELLANEOUS | | |
| C234 | 1-102-114-00 | CERAMIC | 470PF 10% | 50V | ***** | | |
| C235 | 1-102-114-00 | CERAMIC | 470PF 10% | 50V | Δ 1-451-311-31 | DEFLECTION YOKE (Y25FXA) | |
| C236 | 1-102-114-00 | CERAMIC | 470PF 10% | 50V | 1-452-032-00 | MAGNET, DISK; 10MM ϕ | |
| C237 | 1-124-902-00 | ELECT | 0.47MF 20% | 50V | 1-452-094-00 | MAGNET, RPTABLE DISK; 15MM ϕ | |
| C238 | 1-102-978-00 | CERAMIC | 220PF 5% | 50V | 1-452-277-00 | MAGNET, BMC | |
| C239 | 1-126-103-11 | ELECT | 470MF 20% | 16V | 1-503-642-41 | SPEAKER | |
| <CONNECTOR> | | | | 1-574-565-11 | CORD (WITH PLUG) | | |
| CNK21 | *1-562-370-21 | CONNECTOR, BOARD TO BOARD 18P | | Δ 1-559-346-12 | CORD, POWER (WITH CONNECTOR) | | |
| CNK25 | *1-564-880-31 | PLUG, CONNECTOR 3P | | L901 Δ 1-426-372-11 | COIL, DEMAGNETIZATION | | |
| <DIODE> | | | | V901 Δ 8-733-224-05 | PICTURE TUBE (A59JWC60X) | | |
| D201 | 8-719-110-14 | DIODE RD9.1ES-B3 | | ***** | | | |
| D202 | 8-719-110-14 | DIODE RD9.1ES-B3 | | ACCESSORIES AND PACKING MATERIALS | | | |
| D205 | 8-719-110-04 | DIODE RD7.5ES-B3 | | ***** | | | |
| D206 | 8-719-110-04 | DIODE RD7.5ES-B3 | | PART NO. | DESCRIPTION | REMARK | |
| <IC> | | | | A-1470-844-A | COMMANDER ASSY (RM-673) | | |
| IC201 | 8-759-013-17 | IC TDA6200 | | 3-750-032-51 | MANUAL, INSTRUCTION | | |
| <TRANSISTOR> | | | | *4-381-155-01 | BAG, PROTECTION | | |
| Q201 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | *4-387-845-02 | CUSHION (UPPER) (ASSY) | | |
| Q202 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | *4-387-846-02 | CUSHION (LOWER) (ASSY) | | |
| <RESISTOR> | | | | *4-387-847-01 | INDIVIDUAL CARTON | | |
| <RESISTOR> | | | | ***** | | | |
| R201 | 1-249-441-11 | CARBON | 100K 5% | 1/4W | | | |
| R202 | 1-249-425-11 | CARBON | 4.7K 5% | 1/4W | | | |
| R203 | 1-249-441-11 | CARBON | 100K 5% | 1/4W | | | |
| R204 | 1-249-435-11 | CARBON | 33K 5% | 1/4W | | | |
| R205 | 1-249-435-11 | CARBON | 33K 5% | 1/4W | | | |
| R206 | 1-249-423-11 | CARBON | 3.3K 5% | 1/4W | | | |
| R207 | 1-249-423-11 | CARBON | 3.3K 5% | 1/4W | | | |
| R208 | 1-249-431-11 | CARBON | 15K 5% | 1/4W | | | |
| R209 | 1-249-433-11 | CARBON | 22K 5% | 1/4W | | | |
| R210 | 1-249-431-11 | CARBON | 15K 5% | 1/4W | | | |
| R211 | 1-249-441-11 | CARBON | 100K 5% | 1/4W | | | |
| R212 | 1-249-433-11 | CARBON | 22K 5% | 1/4W | | | |
| R213 | 1-249-431-11 | CARBON | 15K 5% | 1/4W | | | |
| R214 | 1-249-417-11 | CARBON | 1K 5% | 1/4W | | | |
| R215 | 1-249-433-11 | CARBON | 22K 5% | 1/4W | | | |
| R216 | 1-249-433-11 | CARBON | 22K 5% | 1/4W | | | |
| R217 | 1-249-431-11 | CARBON | 15K 5% | 1/4W | | | |
| R218 | 1-249-417-11 | CARBON | 1K 5% | 1/4W | | | |
| R219 | 1-249-429-11 | CARBON | 10K 5% | 1/4W | | | |
| R220 | 1-249-425-11 | CARBON | 4.7K 5% | 1/4W | | | |